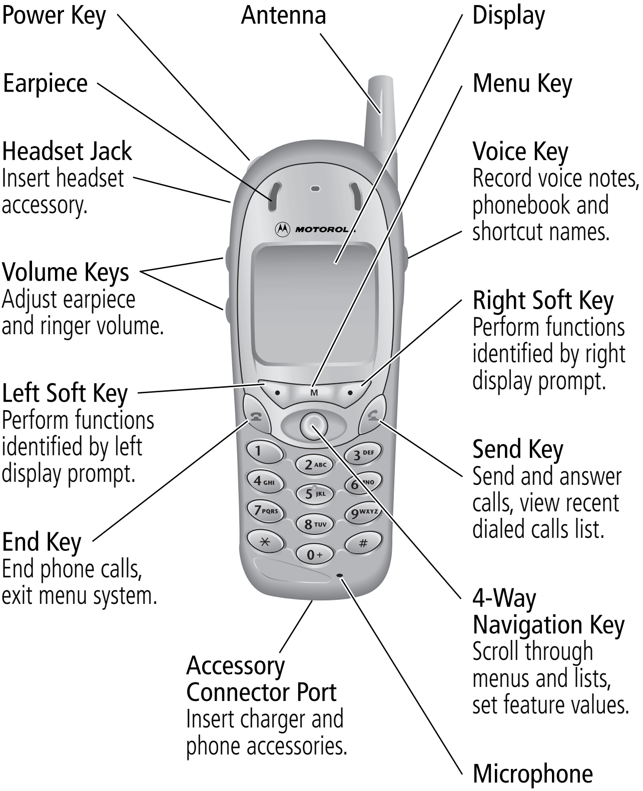
MOTOROLA

DIGITAL WIRELESS
TELEPHONE

User's Guide >

Welcome

Welcome to the world of Motorola digital wireless communications! We are pleased that you have chosen the Motorola Model 280 wireless phone.



Power Key

Earpiece

Headset Jack
Insert headset accessory.

Volume Keys
Adjust earpiece and ringer volume.

Left Soft Key
Perform functions identified by left display prompt.

End Key
End phone calls, exit menu system.

Antenna

Accessory Connector Port
Insert charger and phone accessories.

Display

Menu Key

Voice Key
Record voice notes, phonebook and shortcut names.

Right Soft Key
Perform functions identified by right display prompt.

Send Key
Send and answer calls, view recent dialed calls list.

4-Way Navigation Key
Scroll through menus and lists, set feature values.

Microphone

Personal Communications Sector
600 North U.S. Highway 45
Libertyville, Illinois 60048

1-800-331-6456 (United States)
1-888-390-6456 (TTY/TDD United States)
1-800-461-4575 (Canada)

`www.motorola.com` (United States)
`www.motorola.ca` (Canada)

MOTOROLA, the Stylized M Logo and all other trademarks indicated as such herein are trademarks of Motorola, Inc. ® Reg. U.S. Pat. & Tm. Off. TrueSync, Sidekick, Starfish and the Stylized Starfish Logo are registered trademarks of Starfish Software, Inc., a wholly owned independent subsidiary of Motorola, Inc. All other product or service names are the property of their respective owners.

Software Copyright Notice

The Motorola products described in this manual may include copyrighted Motorola and third party software stored in semiconductor memories or other media. Laws in the United States and other countries preserve for Motorola and third party software providers certain exclusive rights for copyrighted software, such as the exclusive rights to distribute or reproduce the copyrighted software. Accordingly, any copyrighted software contained in the Motorola products may not be modified, reverse-engineered, distributed, or reproduced in any manner to the extent allowed by law. Furthermore, the purchase of the Motorola products shall not be deemed to grant either directly or by implication, estoppel, or otherwise, any license under the copyrights, patents, or patent applications of Motorola or any third party software provider, except for the normal, non-exclusive, royalty-free license to use that arises by operation of law in the sale of a product.

Manual number: 6809438A11-O
Cover number: 8988485L49-O

Menu Map

Main Menu

- **Recent Calls**
    - Received Calls
    - Dialed Calls
    - Notepad
    - Call Times
    - Call Cost
- **Service Dial**
- **Fixed Dial**
- **Phonebook**
- **Datebook**
- **Quick Dial**
- **Radio**
- **Messages**
    - Voicemail
    - Text Msgs
    - Browser Alerts
    - Info Services
    - Quick Notes
    - Outbox
    - Drafts
- **Shortcuts**
- **Voice Notes**
- **SIM Applications**
- **Browser**
- **Calculator**
- **Games**
- **Settings**

(see next page)

Note: This is the standard phone menu layout. You or your service provider may have changed the menu layout or changed some feature names. Not all features may be available for all users.

For example, the **Radio** feature on the main menu (left) is displayed only when the optional FM Stereo Radio Headset accessory is plugged into the accessory connector port on your phone (see phone illustration, page 1).

Shortcuts
Change display zoom: Press M, then press and hold M
Lock/unlock keypad: Press M *
Display my phone number: Press M #
Go to dialed calls list: Press ☎
Exit menu system: Press ☎

Settings Menu

- **Ring/Vibrate**
  - Alert
  - *Alert* Detail
  - My Tones
- **Call Forward**
  - Voice Calls
  - Fax Calls
  - Data Calls
  - Cancel All
  - Forward Status
- **Phone Status**
  - My Tel. Numbers
  - Credit Info/Available
  - Active Line
  - Battery Meter
  - Other Information
- **Connection**
  - IrDA Link
- **Browser Setup**
- **In-Call Setup**
  - In-Call Timer
  - Call Cost Setup
  - My Caller ID
  - Talk and Fax
  - Answer Options
  - Call Waiting
- **Security**
  - Phone Lock
  - Lock Keypad
  - Lock Application
  - Fixed Dial
  - Call Barring
  - SIM Pin
  - New Passwords
- **Other Settings**
  - Personalize
    - Main Menu
    - Keys
    - Greeting
    - Quick Dial
  - Initial Setup
    - Time and Date
    - 1-Touch Dial
    - Auto Redial
    - Backlight
    - Zoom
    - Scroll
    - Animation
    - Language
    - Battery Save
    - Contrast Setting
    - DTMF
    - Master Reset
    - Master Clear
  - Network
  - Car Settings
  - Headset

Contents

About This Guide

Using Your Phone’s Features

This user guide introduces you to the many features in your Motorola wireless phone. A reference guide for your phone is also available that explains the phone’s features in more detail. To obtain a copy of the reference guide or another copy of this user guide, see the Motorola Web site at:

`http://motorola.com/consumer/manuals` (United States)
`http://www.motorola.ca/manuals` (Canada)

or contact the Motorola Customer Call Center at 1-800-331-6456 in the United States or 1-800-461-4575 in Canada.

Navigating To a Menu Feature

You can access many of your phone’s features through the menu system. This guide shows you how to navigate to a specific menu feature as follows:

Find the Feature	M > Recent Calls > Dialed Calls

The > symbol means that you should scroll to and select the feature. This example shows that you must press M, scroll to and select Recent Calls, then scroll to and select Dialed Calls to view the dialed calls list.

Optional Features

Features marked with this label are optional network, SIM card, and/or subscription-dependent features. These features may not be offered by all service providers in all geographical areas. Contact your service provider for information about availability.

Optional Accessories

Features marked with this label require the use of an optional Motorola Original™ accessory.

Safety and General Information

IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION. READ THIS INFORMATION BEFORE USING YOUR PHONE.

RF Operational Characteristics

Your phone contains a transmitter and a receiver. When it is ON, it receives and transmits radio frequency (RF) energy. The phone is capable of transmitting in the frequency ranges of 880 MHz to 915 MHz, 1710 MHz to 1785 MHz, and 1850 MHz to 1910 MHz in digital mode.

When you communicate with your phone, the system handling your call controls the power levels at which your phone transmits. The output power level typically may vary over a range from 0.0 watts to 1.58 watts in digital mode for the 900MHz band, 0.0 watts to 1.00 watts in digital mode for the 1800MHz band, and 0.0 watts to 0.80 watts in digital mode for the 1900MHz band.

Exposure To Radio Frequency Energy

Your Motorola phone is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy (EME):

- United States Federal Communications Commission, Code of Regulations; 47 CFR part 2 sub-part J

- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition
- National Council on Radiation Protection and Measurements (NCRP) of the United States, Report 86, 1986
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada) Safety Code 6. Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999
- Australian Communications Authority Radiocommunications (Electromagnetic Radiation-Human Exposure) Standard 1999

To assure optimal phone performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures:

Portable Phone Operation and EME Exposure

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Do NOT hold the antenna when the phone is in use. Holding the antenna affects call quality and may cause the phone to operate at a higher power level than needed.

Phone Operation

When placing or receiving a phone call, hold your phone as you would a wireline telephone. **Speak directly into the microphone.**

Body-Worn Operation

To maintain compliance with FCC/Health Canada RF exposure guidelines, if you wear a phone on your body when transmitting, always place the phone in a **Motorola-supplied or approved clip, holder, holster, case, or body harness for this product.** Use of non-Motorola-approved accessories may exceed FCC/Health Canada RF exposure guidelines. **If you do not use a body-worn accessory, and are not holding the phone in the normal use position at the ear, ensure the phone and its antenna are at least one inch (2.5 centimeters) from your body when transmitting.**

Data Operation

When using any data feature of the phone, with or without an accessory cable, **position the phone and its antenna at least one inch (2.5 centimeters) from your body.**

Approved Accessories

For a list of approved Motorola accessories, visit our website at `www.motorola.com`.

Electromagnetic Interference/ Compatibility

Note: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your phone in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your phone when on board an aircraft. Any use of a phone must be in accordance with applicable regulations per airline crew instructions.

Medical Devices

Pacemakers

The Advanced Medical Technology Association recommends that a minimum separation of 6 inches (15 centimeters) be maintained between a handheld wireless phone and a pacemaker. These recommendations are consistent with the independent research by, and recommendations of, the United States Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the phone more than six inches (15 centimeters) from your pacemaker when the phone is turned ON.
- NOT carry the phone in the breast pocket.
- use the ear opposite the pacemaker to minimize the potential for interference.
- turn OFF the phone immediately if you have any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Safety and General

Use While Driving

Check the laws and regulations on the use of phones in the area where you drive. Always obey them.

When using your phone while driving, please:

- give full attention to driving and to the road.
- use hands-free operation, if available.
- pull off the road and park before making or answering a call if driving conditions so require.

Operational Warnings

For Vehicles With an Air Bag

Do not place a portable phone in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable phone is placed in the air bag deployment area and the air bag inflates, the phone may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

Turn off your phone prior to entering any area with a potentially explosive atmosphere, unless the phone is a model specifically identified as being “Intrinsically Safe.” Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Note: The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust, or metal powders, and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often but not always posted.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn OFF your phone when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio." Obey all signs and instructions.

Operational Cautions

Antennas

Do not use any portable phone that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

Batteries

All batteries can cause property damage and/or bodily injury such as burns if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

ITC01-076

Getting Started

What’s in the Box?

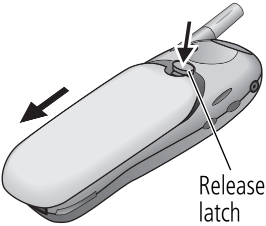
Your digital wireless phone typically comes equipped with a battery and a charger. Other accessory options can customize your phone for maximum performance and portability.

To purchase Motorola Original™ accessories, please contact the Motorola Customer Call Center at 1-800-331-6456 in the United States or 1-800-461-4575 in Canada.

Installing the SIM Card

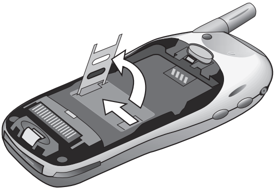
Your SIM (Subscriber Identity Module) card contains your phone number, service details, and phonebook/message memory. It is stored in a recess in the battery compartment.

Caution: Do not bend or scratch your SIM card. Avoid exposing your SIM card to static electricity, water, or dirt.

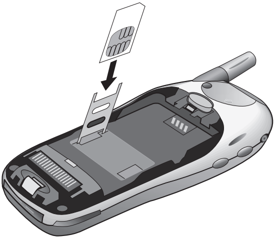
Do This		
1	If the phone’s battery door is already in place, push down the battery door release latch, then slide the door down and lift off.	

Do This

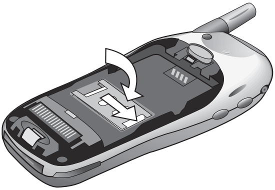
2 Slide the SIM card door to the left and lift open.



3 Insert the SIM card into the SIM card door with the notch in the upper right corner and the gold plate facing down.



4 Close the SIM card door and slide it to the right to lock the SIM card in place.

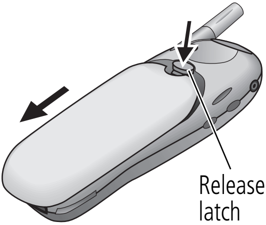
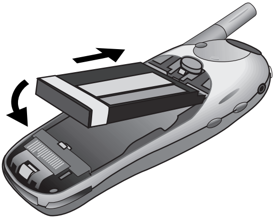
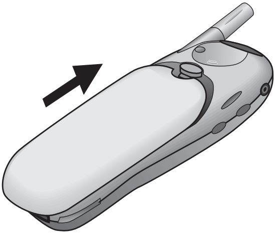


5 Install the battery as described in the following section.

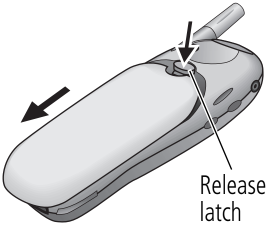
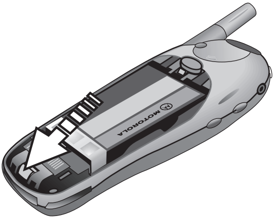
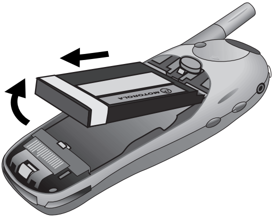
Installing the Battery

Before you can use your phone, you need to install and charge the battery.

Your phone is designed to be used only with Motorola Original batteries and accessories. We recommend that you store batteries in their protective cases when not in use.

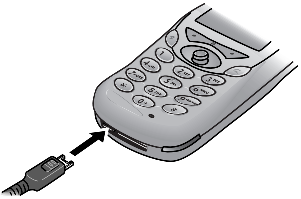
Do This		
1	Remove the battery from its protective clear plastic case.	
2	If the phone's battery door is already in place, push down the battery door release latch, then slide the door down and lift off.	
3	Insert the battery, printed arrow first, into the battery compartment and push down.	
4	Replace the battery door, then slide the door up until it clicks into place.	

Removing the Battery

Do This		
1	Push down the battery door release latch, then slide the door down and lift off.	
2	Pull down the battery release latch.	
3	Pull up on the battery and remove it from the phone.	

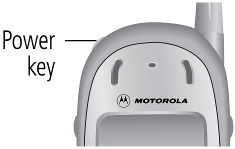
Charging the Battery

Before you can use your phone, you need to install and charge the battery.

	Do This
1	Plug the travel charger into your phone with the release tab facing up. 
2	Plug the other end of the travel charger into the appropriate electrical outlet.
3	When your phone indicates that the battery is fully charged (`Charge Complete`), press the release tab and remove the travel charger.

Note: When you charge the battery, the battery level indicator in the upper right corner of the display shows how much of the charging process is complete. See the "Battery Level Indicator" item on page 29.

Turning Your Phone On

Do This	To
1 Press and hold ◎ (the power key)  	turn on your phone
2 If necessary, enter your SIM card PIN code and press OK (⁄)	unlock your SIM card **Caution:** If you enter an incorrect PIN code three times in a row, your SIM card is disabled and your phone displays the message SIM Blocked. (For more information, see "Protecting the SIM Card" on page 166.)
3 If necessary, enter your four-digit unlock code and press OK (⁄)	unlock your phone The unlock code is originally set to 1234. Your service provider may change this number before you receive your phone.

Sending a Call

To call a number, your phone must be turned on, have a SIM card inserted, be unlocked, and have a network connection with adequate signal strength.

Press		To
1	keypad keys	dial the phone number (up to 32 digits) **Tip:** If you make a mistake, press DELETE (•) to delete the last digit, or press and hold DELETE (•) to clear all digits.
2	☎ (send key)	send the call

Note: You can make an emergency call even when the phone is locked, or when a SIM card is not inserted. See “Sending and Receiving Calls” on page 34.

Ending a Call

Press	To
☎ (end key)	end the call

Receiving a Call

To receive a call, your phone must be turned on, have a SIM card inserted, and have a network connection with adequate signal strength. If your phone is locked, you must unlock the phone to answer the call.

Note: Your phone cannot receive calls when your SIM card is locked.

When you receive a call, your phone rings and/or vibrates and displays an incoming call message.

Press	To
☎ or ANSWER (•)	answer the call

Displaying Your Phone Number

From the idle display:

Press	To
M #	see your phone number

Note: Your phone number must be programmed on your SIM card in order to use this feature.

About Your Phone

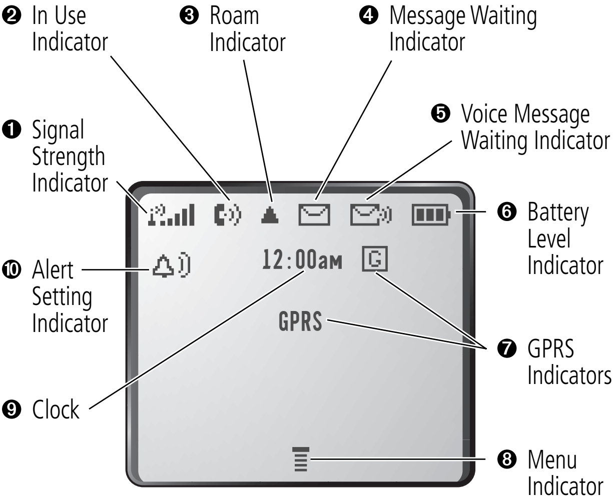
See page 1 for a diagram of your phone that describes basic phone components.

Display

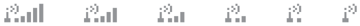
The top section of the display shows phone status indicators. The following illustration shows some of the common indicators that you may see at the top of the display when using your phone.

Messages, phone numbers, and menu options appear in the middle of the display. Text labels at the bottom corners of the display show the current soft key functions. A ≣ (menu) indicator in the bottom center of the display indicates that you can open the main menu or a feature sub-menu to see more options. For more information about the soft key and menu key labels, see "Using the Menu" on page 48.

Some of the phone functions described in this guide must be performed from the idle display. The term *idle display* refers to the standard display that you see when your phone is on and ready to use, when you are *not* on a call or using the menu system.


❷ In Use Indicator
❸ Roam Indicator
❹ Message Waiting Indicator
❺ Voice Message Waiting Indicator
❶ Signal Strength Indicator
❻ Battery Level Indicator
❿ Alert Setting Indicator
12:00AM
G
GPRS
❼ GPRS Indicators
❾ Clock
❽ Menu Indicator

❶ **Signal Strength Indicator** Shows the strength of your phone's connection with the network.

Strong

No signal

You cannot send or receive calls when the "no signal" indicator is displayed.

❷ **In Use Indicator** Appears when a call is in progress.

❸ **Roam Indicator** Appears when your phone uses another network system outside your home network. When you leave your home network area, your phone *roams* or seeks another network.

❹ **Message Waiting Indicator** Appears when your phone receives a text message.

❺ **Voice Message Waiting Indicator** Appears when you receive a voicemail message.

❻ **Battery Level Indicator** Shows the amount of charge left in your battery. The more segments visible, the greater the charge.

High ▮▮▮ ▮▮ ▮ ▭ Empty

Recharge your battery as soon as possible when you see the **Low Battery** warning message.

Note: When you charge the battery, the battery level indicator instead shows how much of the charging process is complete. See "Charging the Battery" on page 23.

❼ **GPRS Indicators** Your service provider may use one of these indicators to indicate that a GPRS packet data connection is active. This type of connection may be used by your service provider to allow faster data transfer speeds. The GPRS indicator does not mean that you are in a call; it indicates only that you are registered on the network via a GPRS connection.

❽ **Menu Indicator** Indicates that you can press M to open a menu. See “Using the Menu” on page 48.

❾ **Clock** Shows the current time.

❿ **Alert Setting Indicator** Shows the current selected alert profile. The default alert setting is a ringer.

🔔	Loud ring	🔔	Soft ring
📳	Vibrate	📳🔔	Ring and vibrate
🔕	Silent		

Changing the Zoom Setting

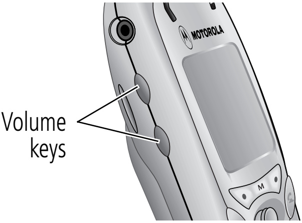
You can set your phone’s display to show either six lines or four lines of text plus soft key labels. Six lines of text display more information, while four lines increase text size.

To change the display view, press M once, then press and hold M again within two seconds of the first press.

You can also adjust the zoom setting from the menu. See the “Zoom” option on page 76.

Volume Keys

Use the upper and lower volume keys to adjust your



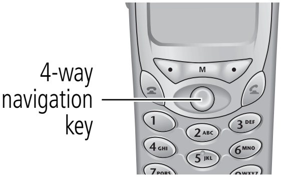
phone's earpiece and ringer volume, and to mute the incoming call alert.

When	Press	To
you are in a call	volume keys	increase or decrease earpiece speaker volume
the idle display is showing	volume keys	increase or decrease ringer volume

You can also use the volume keys to scroll up or down through menus and lists.

To change keypad volume, see "Customize an Alert Profile" on page 142.

4-Way Navigation Key



The 4-way navigation key is a joystick that you use to move through the menu. It lets you adjust feature settings by pressing the key in the desired direction.

Tip: Down and up are your primary movements within menus. Right and left are available for shortcuts (advancing through choices), datebook, adjusting settings (such as contrast or key volume), and when entering or editing text.

Battery Use

Caution: To prevent injuries or burns, do not allow metal objects to contact or short-circuit the battery terminals.

To maximize your battery's performance:

- Always use Motorola Original™ batteries and battery chargers. The phone warranty does not cover damage caused from using non-Motorola batteries and/or battery chargers.
- New batteries or batteries that have been stored for long periods of time may require a longer charge time.
- Maintain the battery at or near room temperature when charging.
- Do not expose batteries to temperatures below -10°C (14°F) or above 45°C (113°F). Always take your phone with you when you leave your vehicle.
- When you do not intend to use a battery for a while, store it uncharged in a cool, dark, dry place, such as a refrigerator.
- Over extended periods of time, batteries gradually wear down and require longer charging times. This is normal. If you charge your battery regularly and notice a decrease in talk time or an increase in charging time, then it is probably time to purchase a new battery.
- The more you talk on the phone or use phone features (like sending text messages), the less standby time your battery has.

The rechargeable batteries that power this product must be disposed of properly and may need to be recycled. Refer to your battery’s label for battery type. Contact your local recycling center for proper disposal methods. Never dispose of batteries in a fire because they may explode.

Sending and Receiving Calls

For basic instructions on how to send a call, end a call, and receive a call, see pages 25–26 of the “Getting Started” section.

This chapter describes features that help you send and receive calls with your phone. For information about other call-related phone functions, see “Recent Calls” on page 79 and “Data and Fax Calls” on page 155.

Redialing a Number

You can redial a previously dialed phone number, whether the call was connected or busy. From the idle display:

Press	To
1 ☎	go directly to the dialed calls list
2 ✥	scroll to the entry you want to call
3 ☎	redial the highlighted number

Using Automatic Redial

Network/Subscription Dependent Feature

If you receive a busy signal, your phone displays the message Call Failed.

When automatic redial is turned on, your phone automatically makes a number of redial attempts until the call goes through. When the call goes through, your phone rings or vibrates one time, displays the message Redial Successful, and then connects the call.

You must turn on automatic redial to use this feature. See the "Auto Redial" option on page 76 to turn on automatic redial.

When automatic redial is turned off, you can manually activate the feature to redial a phone number. When you hear a busy signal and see the `Call Failed` message:

Press	To
☎ or `RETRY` (◌)	activate automatic redial

Caller ID

The *calling line identification* (caller ID) feature lets you see who is calling before you answer.

- If the caller's name is stored in your phonebook, the phone automatically displays the name. Otherwise, the phone displays the caller's phone number.
- If caller ID information is not available, your phone displays the message `Incoming Call`.

Returning an Unanswered Call

Your phone keeps a record of your unanswered calls. When you cannot answer a call, your phone displays:

- the ☎ (missed call) indicator
- the message `X Missed Calls`, where `X` is the total number of missed calls

	Press	To
1	`VIEW` (−)	see the received calls list, with the most recent call at the top
2	◈	scroll through the list and select a call that you want to return
3	☎	send the call

Dialing an Emergency Number

Your service provider programs one or more emergency phone numbers (such as 911) that you can call under any circumstances. You can dial and call the emergency number even when your phone or keypad is locked, when you are prompted to enter a code or password, when the SIM card is not inserted in your phone, or when the SIM card is blocked or disabled.

Note: Emergency numbers vary by country. Your phone’s emergency number(s) may not work in all locations.

To call the emergency number at any time:

	Press	To
1	keypad keys	dial the emergency number (such as 911)
2	☎	call the emergency number

Entering Numbers in the Notepad

Your phone stores the most recent string of digits entered on the keypad in a temporary memory location called the *notepad*. These digits can be the last phone number that you called, or a phone number that you simply entered but did not call. These digits remain in the notepad even when you turn off the phone.

You can use the notepad to store a phone number that you intend to call later (such as a phone number told to you by the other party during a call). To retrieve these digits, see "Using the Notepad" on page 82.

Terminating an Incoming Call

While the phone is ringing or vibrating:

Press	To
☎ or IGNORE (⌣)	cancel the incoming call

Depending on your phone settings and the type of subscription you have with your service provider, the call may be forwarded to another number, or the calling party may hear a busy signal.

Dialing With Speed Dial

The *speed dial* feature lets you dial any phonebook entry with a minimal number of keypresses.

Whenever you store an entry in your phonebook, the entry is assigned a unique speed dial number. If you know the speed dial number for the phonebook entry you want to call, you can use the speed dial feature.

	Press	To
1	keypad keys	enter the one-, two-, or three-digit speed dial number for the entry you want to dial
2	#	submit the number
3	☎	call the entry

To make an entry in the phonebook or view an existing entry's speed dial number, see "Storing a Phonebook Entry" on page 88.

Dialing With 1-Touch Dial

You can call phonebook entries 1 through 9 with the push of a single key. Just press and hold the one-digit speed dial number for one second.

To store entries in locations 1 through 9 in the phonebook, see "Storing a Phonebook Entry" on page 88.

Note: You must specify which phone number list you want to use with this feature: phone memory phonebook, or SIM card phonebook. See “1-Touch Dial Preference” on page 99.

Dialing a Number In a Text Message

If you receive a text message with an embedded phone number, you can dial the number directly.

Note: You must set up the text message inbox before you can receive text messages. See “Setting Up the Text Message Inbox” on page 111.

Find the Feature M > Messages > Text Msgs

Press		To
1	✥	scroll to the message with the number
2	M	open the Text Msg Menu
3	✥	scroll to Call Back
4	SELECT (⊙)	dial the number in the message

If the message contains more than one phone number, press ✥ to scroll to a number and then press SELECT (⊙) to dial.

Additional Dialing Features

In addition to pressing numbers on your keypad, you can insert numbers or characters and send calls in a variety of ways.

To insert the local international access code:

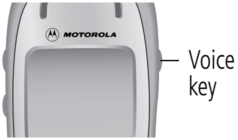
Do This	To
Press 0+ for two seconds	insert the international access code for the country from which you are calling

While dialing (with digits visible in the display):

Do This	To
Press M > Attach Number	attach a number from the phonebook or recent call lists to the end of the digits you entered
Press M > Hide ID/Show ID	Hide (or show) your caller ID for the next call.
Press M > Send Message	create a text message addressed to the number entered
Press M > Talk Then Fax	talk and then send a fax to the same phone number within the same call

Do This	To
Press M and then scroll to and select one of the following:	insert a special character for calls that require you to send additional digits (for example, to make a calling card call, or to retrieve messages from an answering machine):
• Insert Pause (to insert a p)	• **Pause** tells your phone to wait until the call connects before it automatically sends the next digit(s) in a series.
• Insert Wait (to insert a w)	• **Wait** tells your phone to wait until the call connects, and then to prompt you for confirmation before it sends the next digit(s).
• Insert 'n' (to insert an n)	• **'n'** tells your phone to prompt you for a number before dialing the call. The number you enter is inserted into the dialing sequence in place of the n character. **Note:** You cannot store dialing sequences that contain a w or n character on the SIM card (as a phonebook entry or fixed dial entry).

You can also call numbers using these features:

Do This	To Call
Press and release the voice key on the right side of your phone and say the entry's name (in two seconds).  	a phone number using the voice dial feature See "Recording a Voice Name For a Phonebook Entry" on page 91.
Press M > **Service Dial** > *entry to call*	a service dial number programmed on the SIM card
Press M > **Fixed Dial** > *entry to call*	a fixed dial number
Press M > **Recent Calls** > **Received Calls** or **Dialed Calls** > *entry to call*	a missed call or a number from a call you recently dialed or received

Using Features While On a Call

Using Call Waiting

Network/Subscription Dependent Feature

If you subscribe to call waiting, an alert tone sounds while you are on a call to indicate that you have received a second call.

To put the first call on hold and answer the second call:

Press	To
1 ☎	answer the new call
2 SWITCH (⊙)	switch back to the first call **Note:** You can press SWITCH (⊙) at any time to switch between calls.
or	
LINK (⊙)	connect the two calls
or	
M > End Call On Hold	end the call that is on hold

You must activate call waiting in order to use the feature. To activate call waiting, see the “Call Waiting” option on page 73.

Making a Conference Call

To talk to more than one person on a call, you can make a conference call. Call the first person, call the second person, then link the two calls.

	Press	To
1	keypad keys	dial the first person’s number
2	☎	call the number
3	HOLD (-) (if available) **or** M > Hold	put the first call on hold Your phone displays a ☎ (flashing phone) indicator next to the call on hold.
4	keypad keys	dial the next person’s number
5	☎	call the number Your phone displays a ▮ (active call) indicator next to the new active call.
6	LINK (+)	connect the two calls
7	☎	end the entire call

Transferring a Call

While you are on a call, you can transfer the call to another phone by first talking to the person who answers the other phone, or by directly transferring the call.

Announce the Call Transfer

You can talk to the person who answers the other phone before you transfer the call, to tell them whom you are transferring.

Find the Feature M > Hold

Press		To
1	keypad keys	enter the phone number where you are transferring the call
2	N	dial the phone number Speak to the person who answers the target phone.
3	M	open the menu
4	S	scroll to Transfer
5	SELECT (+)	select Transfer
6	OK (+)	confirm the transfer Your phone displays the message Transfer: Complete when the call is transferred. You can hang up the phone when you see this message.

Do Not Announce the Call Transfer

You can directly transfer a call without talking to the person who answers.

Find the Feature M > `Transfer`

Press		To
1	keypad keys	enter the phone number where you are transferring the call
2	☎	dial the phone number Your phone displays the message `Transfer: Complete` when the call is transferred. You can hang up the phone when you see this message.

Additional On-Call Features

While you are on a call, you can perform the following tasks:

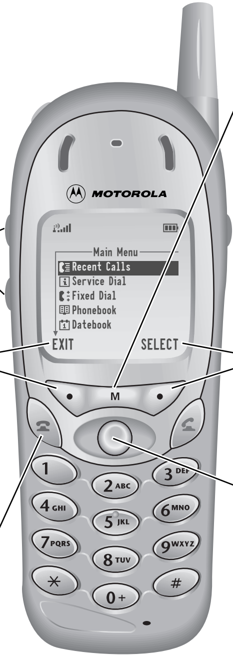
Do This	To
Press `HOLD` (+) (if available) **or** Press M > `Hold`	put a call on hold Your phone displays a ☎ (flashing phone) indicator to indicate that the call is on hold.
Press M > `My Tel. Numbers`	see your phone number
Press M > `Received Calls` or `Dialed Calls`	view the telephone numbers from calls you have recently received or dialed

Do This	To
Press M > Messages	view or send messages from the message center
Press M > Datebook	view your schedule of events stored in the datebook
Press M > Other Information	view a list of feature specifications for your phone

Using the Menu

Navigating to a Feature

You can access many of your phone's features by using these keys to move through the menu system:



Menu Key
Enter the menu system, or open a sub-menu, when ≣ appears in the bottom center of the display.

Volume Keys
Scroll up or down through menus and lists.

Right Soft Key
Perform the function shown in the lower right corner of the display (usually `SELECT` the highlighted menu item).

Left Soft Key
Perform the function shown in the lower left corner of the display (usually `EXIT` or `BACK`).

4-Way Navigation Key
Scroll **up** or **down** through menus and lists. Scroll **left** or **right** to cycle through and set the value of the highlighted menu item.

End Key
Exit the menu system without making changes, return to the idle display.

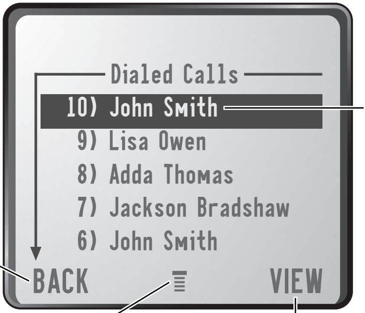
This guide shows you how to navigate to a specific menu feature as follows:

Find the Feature M > Recent Calls
> Dialed Calls

The > symbol means that you should scroll to and select the feature. This example shows that you must press M, scroll to and select Recent Calls, then scroll to and select Dialed Calls to see the dialed calls list.

Selecting a Feature Option

Some features require you to select an item from a list:



Dialed Calls

10) John Smith

9) Lisa Owen

8) Adda Thomas

7) Jackson Bradshaw

6) John Smith

BACK ≣ VIEW

Highlighted item

Press BACK (-) to go back to the previous screen.

A sub-menu is available. Press M to open the sub-menu.

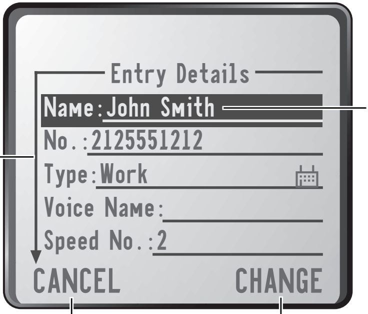
Press VIEW (+) to view details of the highlighted item. STORE (+) appears if you can store the item in your phonebook.

Select an item by highlighting it. Use one of the following approaches:

- Press ✥ to scroll up or down to the item you want.
- In a numbered list, press a number key to highlight the item.
- In an alphabetized list, press a key multiple times to cycle through the letters on the key and highlight the closest matching list item.

Entering Feature Information

Features such as the phonebook and datebook require you to enter information to fill in an entry's details:



Entry Details
Name:John Smith
No.:2125551212
Type:Work
Voice Name:
Speed No.:2

Press ✥ to scroll down to additional items.

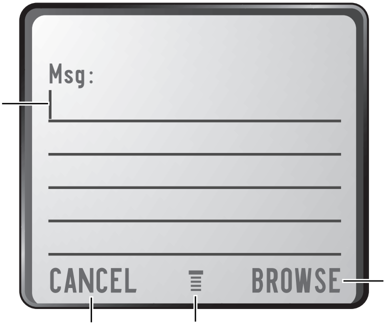
Highlighted item

Press CANCEL (-) to exit without making changes. DONE (-) appears when you enter or edit information. Press DONE (-) to save your changes.

Press CHANGE (+) to edit the selected information.

- Enter numbers or text with the keypad. (See "Entering Text" on page 53.)
- When an item has a list of possible values, press ✥ to the left or right to scroll through and select a value.
- When an item has a list of possible numeric values, press a number key to set the value.
- If you enter or edit information and then decide that you do not want to save your changes, press ☎ to exit without saving.

The message center lets you compose and send text messages. (See "Entering Text" on page 53.) A *flashing cursor* shows you where the text will appear:



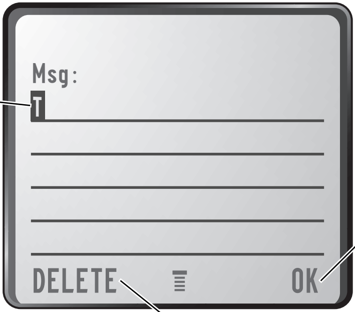
Flashing cursor indicates insertion point.

Press **BROWSE** (•) to view and insert a name, number, or message from previously stored information.

Press **CANCEL** (•) to exit without making changes.

Press M to open the sub-menu.

When you enter text, the flashing cursor changes to a *block cursor*, and the soft key functions change:



Block cursor indicates current highlighted character.

Press **OK** (⊙) to accept and store the text.

After two seconds, the block cursor reverts to a flashing cursor and moves to the next position.

Press **DELETE** (⊙) to delete the character to the left of the insertion point.

Entering Text

Various text entry methods make it easy for you to enter names, numbers, and text messages on your phone.

You can enter all characters (letters, numbers, and symbols) using the standard tap method. Other text modes let you easily enter numbers and symbols, or insert text already stored on your phone. Finally, a predictive text mode lets you enter text messages with a minimum of keypresses.

Choosing a Text Mode

To activate a text mode, press M from any text entry screen and select the text mode from the **Entry Method** menu:

iTAP	Let the phone predict each word as you enter it, then choose the word from a list (see "Predictive Text Entry with iTAP™ Software" on page 58).
Tap Method	Enter characters one at a time by pressing the key for the letter, number, or symbol (see "Tap Method" on page 54). This is the standard mode for entering text on your phone.
Numeric	Enter only the number that appears on each key.
Symbol	Enter symbols only (see "Symbol Mode" on page 57).
Browse	Browse through your phonebook and recent calls lists to select a name or number to enter.

Note: The text mode you select remains active until you change it by selecting another mode.

Tap Method

Tap method is the default standard mode for entering text on your phone.

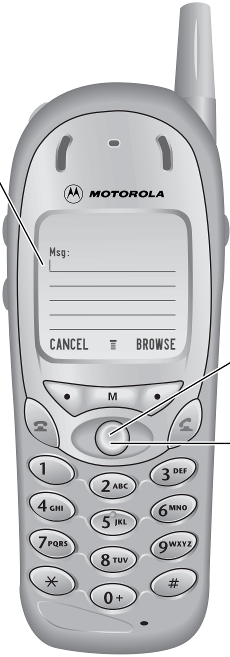
To activate tap method from any text entry screen, press M and select the **Tap Method** menu option.

To enter text using the tap method:

Do This		To
1	Press a number key one or more times	cycle through the characters associated with the key and select the character you want (see the "Character Chart" on page 56).
2	Continue to press number keys	enter the rest of the characters in the text message
3	Press **OK** (⊙)	accept and store the text when you are finished

General Text Entry Rules

Use the keypad to enter letters, numbers, symbols, and other characters with the tap method. Press the same key repeatedly to cycle through available characters (see the “Character Chart” on page 56):



Press a number key to enter text at flashing cursor location.

Press a number key as many times as necessary to enter the desired character.

Press and hold a number key to cycle between tap method and numeric text entry mode.

Press navigation key **up** or **down** to change character in block cursor to uppercase or lowercase.

Press navigation key **left** or **right** to move flashing cursor to the left or right in text message.

- If you do not press a key for two seconds, the character in the block cursor is accepted, and the cursor moves to the next position.
- The first character of every sentence is capitalized unless you manually change it. (Press ✥ down to force the character to lowercase while it is highlighted by the block cursor.)

Character Chart

Use this chart as a guide for entering spaces, numbers, letters, symbols, and other characters with the tap method.

1	*space* . 1 ? ! , @ _ & ~ : ; " - ( ) ' ¿ ¡ % £ $ ¥ ¤ €
2ABC	a b c 2 ä å á à â ã α β ç
3DEF	d e f 3 δ ë é è ê φ
4GHI	g h i 4 ï í î γ
5JKL	j k l 5 λ
6MNO	m n o 6 ñ ö ø ó ò ô õ ω
7PQRS	p q r s 7 π β σ
8TUV	t u v 8 θ ü ú ù û
9WXYZ	w x y z 9 ξ ψ
0+	+ - 0 x * / \ [ ] = > < # §

Symbol Mode

Your phone provides an alternate way to find and enter symbol characters in a text message. You can view and select from a variety of available symbols.

To activate symbol mode from any text entry screen, press M and select the **Symbol** menu option.

To enter a symbol in symbol mode:

Do This		To
1	Press a number key one time	display its symbol options (see the "Symbol Chart" on page 58) The symbols associated with the key you pressed are shown at the bottom of the display. If necessary, press other keypad keys to find the symbol you want.
2	Press ✥ **or** Press the number key multiple times	highlight the symbol you want
3	Press **SELECT** (⊡)	add the highlighted symbol to the text area at the top of the display

Symbol Chart

Use this chart as a guide for entering symbols in symbol mode.

1	*space* . ? ! , @ _ & ~ : ; " - ( ) ' ¿ ¡ % £ $ ¥ ¤ €
2 ABC	@ _ \
3 DEF	/ : ;
4 GHI	" & '
5 JKL	( ) [ ] { }
6 MNO	¿ ¡ ~
7 PQRS	< > =
8 TUV	$ £ ¥ ¤ €
9 WXYZ	# % *
0 +	+ - x * / = > < # §

Predictive Text Entry with iTAP™ Software

iTAP™ software provides a predictive text entry method that lets you enter the letters of a word using only one keypress per letter.

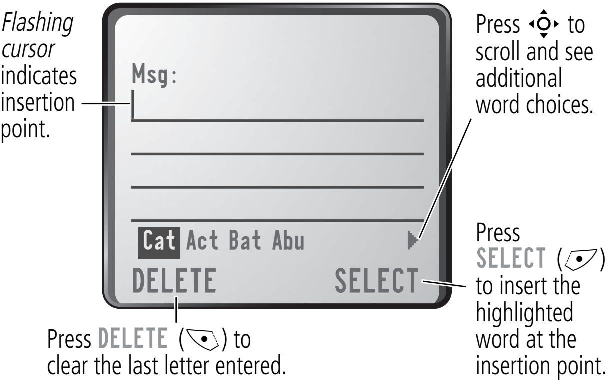
You must activate iTAP software prior to entering letters. You can do this from any text entry screen by pressing M to open the **Entry Method** menu and selecting the **iTAP** menu option.

Enter Words

To enter a word with iTAP software:

Do This		To
1	Press a number key one time	enter the first letter of the word The letters associated with the key you pressed are shown at the bottom of the display.
2	Press number keys (one per letter)	enter the rest of the word Alternative words and letter combinations are shown at the bottom of the display based on the keys you press. These word choices are updated with each keypress.
3	When you have entered all the letters of the word, press ✥	locate and highlight the word you want
4	Press SELECT (⊙)	add the highlighted word to the text area at the top of the display A space is automatically inserted after the word.

For example, to spell the word "act," press 2 2 8. The display shows:



Flashing cursor indicates insertion point.

Press ✥ to scroll and see additional word choices.

Press SELECT (+) to insert the highlighted word at the insertion point.

Press DELETE (-) to clear the last letter entered.

Enter Novel Words

You may enter a word that is not in the iTAP software dictionary. If you enter all the letters of a word but the word is not displayed:

Do This		To
1	Press DELETE (-) one or more times	delete one or more letters until you see a letter combination that matches the start of the word
2	Press ✥	highlight the letter or letter combination

Do This		To
3	Press SELECT (⊡), then press ✥ to the left	shift the text entry cursor to the left and “lock” the selected portion of the word
4	Continue entering letters and highlighting letter combinations	spell the word

Punctuation

The iTAP software automatically adds a space after each word. When you enter punctuation, this space is removed. To enter punctuation with iTAP software:

Press	To
1 or 0+	enter punctuation or other characters as shown in the “Character Chart” on page 56

Capitalization

The first word of a sentence is automatically capitalized, with following words in lowercase. To set or adjust character capitalization with iTAP software:

Press	To
✥ up or down	change the words to initial character capitalized, all uppercase characters, or all lowercase characters

Enter Numbers

To enter a number with iTAP software:

Do This		To
1	Enter the first digit and then highlight it	put the iTAP software in number entry mode
2	Press number keys	add digits to the number
3	Press **SELECT** (⊙)	enter the number at the insertion point

Delete Letters and Words

Place the cursor to the right of the text that you want to delete, and then do the following:

Do This	To
Press **DELETE** (⊙)	delete one letter at a time
Continue to hold **DELETE** (⊙)	delete the entire message

Menu Feature Descriptions

This chapter describes all of your phone's features in order of the menu map shown on pages 3–4. Some descriptions also include page numbers where you can find more detailed information.

If you would like to learn more about a specific feature, a reference guide for your phone is also available. To obtain a copy of the reference guide or another copy of this user guide, see the Motorola Web site at:

`http://motorola.com/consumer/manuals` (United States)
`http://www.motorola.ca/manuals` (Canada)

or contact the Motorola Customer Call Center at
1-800-331-6456 (United States) or 1-800-461-4575 (Canada).

Main Menu

RECENT CALLS

Received Calls M > `Recent Calls` > `Received Calls`

View a list of recently received calls. See "Viewing the Received Calls or Dialed Calls List" on page 79.

Dialed Calls M > `Recent Calls` > `Dialed Calls`

View a list of recently dialed calls. See "Viewing the Received Calls or Dialed Calls List" on page 79.

Notepad

M > Recent Calls
> Notepad

Call or store the last number entered on the keypad. See “Entering Numbers in the Notepad” on page 37, and “Using the Notepad” on page 82.

Call Times

M > Recent Calls
> Call Times

View call timers that track time spent on your last call, dialed calls, received calls, all calls since reset, and all calls total. See “Viewing and Resetting Call Timers” on page 83.

Call Cost

M > Recent Calls
> Call Cost

View call cost information. Your network may provide current credit information, and can provide cost information about the amount spent on your last call, dialed calls, received calls, and all calls total. See “Viewing and Resetting Call Costs” on page 84.

SERVICE DIAL

M > Service Dial

Dial pre-programmed numbers stored on your SIM card. Your service provider can program your SIM card with phone numbers for services such as taxi companies, restaurants, and hospitals.

FIXED DIAL

M > Fixed Dial

Dial and edit numbers in the fixed dial list.

When you activate the fixed dial feature, users can only call the numbers in the fixed dial list. To activate fixed dial, see the “Fixed Dial” option on page 74.

Fixed dial list entries can be any length. If there is a fixed dial entry for the digits 555, users can call any number that starts with 555.

You must enter your SIM PIN2 code to edit fixed dial entries. In the fixed dial list, you can create, edit, delete, and sort entries just like in the phonebook list. Fixed dial list entries are stored on your SIM card and do not have **Type** or **Voice Name** fields.

Note: Employers can use fixed dial to limit employees' phones to a predefined list of numbers, country codes, or other prefixes.

PHONEBOOK M > Phonebook

Store names and numbers as entries in your phonebook, then call numbers by selecting them from the phonebook list. See "Phonebook" on page 87.

DATEBOOK M > Datebook

Use the datebook calendar to schedule and review your appointments. See "Datebook" on page 100.

QUICK DIAL M > Quick Dial

Network/Subscription Dependent Feature

Dial pre-programmed numbers stored on your phone. Your service provider may program your phone with one or more quick dial numbers, such as the customer service number. You can call them by selecting them from the quick dial list.

Note: Your service provider may use a different name for this feature.

RADIO M > Radio

Optional Accessory

Listen to FM radio stations with the optional Motorola Original™ FM Stereo Radio Headset accessory. This menu feature is displayed only when the FM Stereo Radio Headset is plugged into the accessory connector port on your phone. See “Radio” on page 106.

MESSAGES M > Messages

Network / Subscription Dependent Feature

Adjust message settings, view and manage the various types of messages your phone can receive and/or send:

Voicemail	Listen to your recorded voice messages. See “Messages—Voicemail” on page 109.
Text Msgs	Send and receive text messages. See “Messages—Text” on page 111.
Browser Alerts	Read alert messages received by your micro-browser.
Info Services	Read information services messages (subscription-based broadcast messages, such as stock updates, news, and weather reports) that you have received.
Quick Notes	Select and send pre-written messages from the quick notes list. See “Sending a Quick Note Text Message” on page 118.

`Outbox`	View all outgoing text messages, delivered and undelivered.
`Drafts`	Store and edit text messages that you have written but not sent.

SHORTCUTS M > `Shortcuts`

Create keypad or voice shortcuts to menu features. See “Shortcuts” on page 121.

VOICE NOTES M > `Voice Notes`

Use the voice key to record messages and phone calls. See “Voice Notes” on page 125.

Note: Recording phone calls is subject to varying state and federal laws regarding privacy and recording of conversations.

SIM APPLICATIONS M > `SIM Applications`

Network/Subscription Dependent Feature

Access information and applications stored on your SIM card.

Your SIM card may contain applications that process your outgoing calls, text messages, and other events. Contact your service provider for details.

BROWSER M > `Browser`

Network/Subscription Dependent Feature

Access Web pages and run Web-based applications. The micro-browser delivers WAP (Wireless Application Protocol) pages from your service provider directly to your phone. See “Micro-Browser” on page 131.

CALCULATOR

M > Calculator

Use your phone as a calculator or currency converter. See “Calculator” on page 133.

GAMES

M > Games

Play games on your phone. See “Games” on page 136.

Settings Menu

RING/VIBRATE

Alert

M > Settings > Ring/Vibrate > Alert

Select a ring or vibration alert profile for incoming calls and messages. See “Ring/Vibrate” on page 141.

Alert Detail

M > Settings > Ring/Vibrate > *Alert* Detail

Change details about the current alert profile. *Alert* represents the name of the alert profile. See “Ring/Vibrate” on page 141.

My Tones

M > Settings > Ring/Vibrate > My Tones

Create custom alert tones for your phone. See “Use the My Tones Feature” on page 143.

CALL FORWARD

M > Settings
> Call Forward

Set options for forwarding incoming voice, data, and/or fax calls to another phone number. See "Call Forwarding" on page 149.

PHONE STATUS

My Tel. Numbers

M > Settings
> Phone Status
> My Tel. Numbers

View, enter, and edit information about your name and phone number.

Credit Info

M > Settings
> Phone Status
> Credit Info

View the credit available, its expiration date, and the date of the last deposit. (This menu option is available only if you subscribe to a prepay option.)

Credit Available

M > Settings
> Phone Status
> Credit Available

View the credit available. (This menu option is available only if you subscribe to the advice of charge option.)

Active Line M > Settings
> Phone Status
> Active Line

Change the active phone line to send and receive calls from either of the available numbers. (This menu option is available only for dual-line enabled SIM cards.)

Battery Meter M > Settings
> Phone Status
> Battery Meter

View a detailed battery charge meter.

Other Information M > Settings
> Phone Status
> Other Information

View your phone’s feature specifications (if available from the service provider).

CONNECTION

Connect your phone to a computer or hand-held device to send and receive data and fax calls on the connected device. See “Data and Fax Calls” on page 155.

IrDA Link M > Settings > Connection
> IrDA Link

Set up a wireless infrared connection. See “Establish an Infrared Connection” on page 157.

BROWSER SETUP

M > Settings
> Browser Setup

Network / Subscription Dependent Feature

Adjust the micro-browser's network connection settings, or create a new network connection profile.

IN-CALL SETUP

Set the features that are active during a call, such as the in-call timer, call waiting, and call answering options.

In-Call Timer

M > Settings
> In-Call Setup
> In-Call Timer

Adjust call timer **Display** and **Beep** settings. You can set your timer to beep at a selected interval during your calls. (60 seconds is the default.) You can also turn on or off a display timer during calls as follows:

Time	Display the elapsed time for the current call.
Cost	Display the cost of the current call (if you subscribe to a call cost option or advice of charge). Network / Subscription Dependent Feature
Total Cost	Display the cost of all calls since the last time you reset the timer (if you subscribe to a call cost option or advice of charge). Network / Subscription Dependent Feature

`Credit Available`	Display how much credit you have left (if you subscribe to a call cost option or advice of charge).
`Off`	No in-call timer display.

Call Cost Setup M > `Settings`
> `In-Call Setup`
> `Call Cost Setup`

Adjust call cost settings.

You can specify a credit limit so that the phone displays your remaining credit during calls. Your phone notifies you when you approach your limit, and ends the call when you reach it.

Your phone network expresses cost in the amount of units used, but this feature lets you tell your phone how to translate the units to a currency.

My Caller ID M > `Settings`
> `In-Call Setup`
> `My Caller ID`

Activate and deactivate the display of your phone number as an ID when you call someone.

Talk and Fax M > `Settings`
> `In-Call Setup`
> `Talk and Fax`

Activate and deactivate the talk/fax service.

Use this feature prior to making a call when you want to talk and then send or receive a fax—all to the same phone number and within the same call.

You can also use the talk then fax feature to send a fax during a call. See "Sending a Talk Then Fax Call" on page 160.

Answer Options M > Settings
> In-Call Setup
> Answer Options

Turn call answering options on or off:

Multi-Key	Answer by pressing any key.

Call Waiting M > Settings
> In-Call Setup
> Call Waiting

Activate and deactivate call waiting.

When call waiting is activated and another call arrives while you are on a call, call waiting can play a tone to notify you of the new call. See "Using Call Waiting" on page 43.

SECURITY

Phone Lock M > Settings > Security
> Phone Lock

Lock and unlock your phone. See "Locking and Unlocking Your Phone" on page 164.

Lock Keypad M > Settings > Security
> Lock Keypad

View instructions on how to lock and unlock your keypad. See "Locking and Unlocking Your Keypad" on page 165.

Lock Application M > Settings > Security > Lock Application

Lock and unlock specific phone applications (such as phonebook or datebook). When an application is locked, users must enter the unlock code to use the application.

Fixed Dial M > Settings > Security > Fixed Dial

Network / Subscription Dependent Feature

Restrict outgoing calls to numbers on the fixed dial list. To view the fixed dial list, see “Fixed Dial” on page 64.

Call Barring M > Settings > Security > Call Barring

Restrict incoming and outgoing calls. See “Barring Calls” on page 166.

SIM PIN M > Settings > Security > SIM PIN

Switch SIM card protection on and off, so users must enter the SIM card PIN code when they turn on the phone or insert a SIM card. See “Protecting the SIM Card” on page 166.

New Passwords M > Settings > Security > New Passwords

Change your unlock code (originally set to 1234) or your security code (originally set to 000000). See “Assigning a New Code or Password” on page 162.

OTHER SETTINGS

Personalize

M > Settings
> Other Settings
> Personalize

Set several personal phone options:

Main Menu	Change the order of the main menu. See “Reordering Menu Items” on page 151.
Keys	Change the functions of the soft keys in the idle display. See “Customizing a Soft Key Function” on page 151.
Greeting	Change the text displayed when you turn on your phone.
Quick Dial	Change quick dial number(s).

Initial Setup

M > Settings
> Other Settings
> Initial Setup

Set many basic phone options:

Time and Date	Set the phone’s time and date.
1-Touch Dial	Assign the 1-touch dial feature to numbers 1 through 9 in your phone memory phonebook or SIM card phonebook. See “1-Touch Dial Preference” on page 99.

Auto Redial	Use this option to turn on or turn off the automatic redial feature. When you turn on automatic redial, your phone automatically redials calls that fail due to busy conditions. See "Using Automatic Redial" on page 34.
Backlight	Set the amount of time that the display backlight remains on, or turn off the backlight to conserve battery power.
Zoom	Switch between six lines (**Zoom Out**) and four lines (**Zoom In**) of display text.
Scroll	Force the cursor to stop or wrap around when it reaches the top or bottom of a list in the display.
Animation	Turn animation off (to conserve the battery) or on. Animation makes your phone's menus move smoothly as you scroll up and down.
Language	Set the language for phone menus.
Battery Save	Adjust the phone's power usage characteristics to conserve power.
Contrast Setting	Adjust the contrast setting for your display.

`DTMF`	Your phone can send a number to the network as dual tone multi-frequency (DTMF) tones. DTMF tones are used to communicate with automated systems that require you to enter a number such as a code, password, or credit card number. Use this option to set DTMF tones to be long, short, or off.
`Master Reset`	Reset all options back to their original factory settings *except* for the unlock code, security code, and lifetime timer.
`Master Clear`	Reset all options back to their original factory settings *except* for the unlock code, security code, and lifetime timer, *and* clear all user settings and entries *except* for information on the SIM card. **Note:** This option *erases all user-entered information* stored in your phone's memory, including phonebook and datebook entries. Once you erase the information, it cannot be recovered.

Network

M > `Settings`
> `Other Settings`
> `Network`

Your service provider registers your phone to a network. You can view information about the current network, change how your phone searches for a network, specify your preferred networks, activate alerts that indicate when a call is dropped or network registration changes, and change your phone’s frequency band setting for different geographical regions (1900 MHz or 900/1800 MHz).

Use the `Network Setup` option to change the frequency band setting if you travel from regions using 1900 MHz (common in North and South America) to regions using 900/1800 MHz (common in Europe and Asia) or vice versa. Contact your service provider for more information regarding global roaming.

Car Settings

M > `Settings`
> `Other Settings`
> `Car Settings`

Optional Accessory

Adjust hands-free car kit settings.

You can set your phone to route calls directly to the car kit when it detects a connection, and automatically answer calls after two rings. See “Hands-Free Use” on page 152.

Note: The use of wireless devices and their accessories may be prohibited or restricted in certain areas. Always obey the laws and regulations on the use of these products.

Headset

M > `Settings`
> `Other Settings`
> `Headset`

Optional Accessory

Set your phone to automatically answer calls after two rings when connected to a headset. See “Hands-Free Use” on page 152.

Recent Calls

You can use the recent calls menu to view received calls or dialed calls, retrieve the last number stored in the notepad, and view or reset call times and costs.

Viewing the Received Calls or Dialed Calls List

Your phone keeps lists of the numbers from calls you recently received and dialed, even if the calls did not connect. The lists are sorted from newest to oldest entries. The oldest entries are deleted as new ones are added. Each entry tells you the person's number (or name, if available) and whether the call connected or not. You can call, store, or delete the numbers on these lists.

Shortcut: Press ☎ to go directly to the dialed calls list from the idle display.

To open the recent calls menu:

Find the Feature M > `Recent Calls`

Press	To
1 ◈	scroll to `Received Calls` or `Dialed Calls`
2 `SELECT` (⊙)	select `Received Calls` or `Dialed Calls`
3 ◈	scroll to an entry you want to call, store, or delete **Note:** ✓ means the call connected.

Press	To
4 ☎	call the entry’s number **Tip:** Press and hold ☎ for two seconds to send the entry number as DTMF tones. To activate DTMF tones, see the “DTMF” option on page 77.
or	
•	view the entry’s details if `View` appears above the • key, or store the entry’s details in the phonebook if `Store` appears above the • key
or	
M	open the `Last Calls Menu` to perform other procedures as described in the following list

The `Last Calls Menu` includes the following options:

Option	Description
`Store`	Create a phonebook entry with the selected number in the `No.` field. (This option is not available if `STORE` appears above the • key, or if the number is already stored as a phonebook entry.)
`Delete`	Delete the entry. (This option is not available if `DELETE` appears above the • key.)
`Delete All`	Delete all entries in the current list.

Option	Description
Hide ID/Show ID	Hide (or show) your caller ID for the next call.
Send Message	Create a new text message, with the selected number in the **To** field. See “Sending a Text Message” on page 116.
Add Digits	Add digits to the end of the selected number.
Attach Number	Attach another number from the phonebook or recent calls list to the end of the selected number.
Send Tones	Send the selected number to the network as DTMF tones, for credit card calling or password entry. (This option is available only during an active call.) To activate DTMF tones, see the “DTMF” option on page 77.
Talk then Fax	Network/Subscription Dependent Feature Tell the network you want to call and talk to someone, and then send a fax—all to the same number in the same call. See “Sending a Talk Then Fax Call” on page 160.

Using the Notepad

Your phone uses a notepad to store the most recent string of digits entered—either for a phone number that you called or for a number that you entered but did not call.

To call the number, create a phonebook entry, or perform other operations with the number stored in the notepad:

Find the Feature M > Recent Calls > Notepad

Press	To
☎	call the number
or	
M	open the Dialing Menu (to attach a number or insert a special character). See "Additional Dialing Features" on page 39.
or	
STORE (•)	create a new phonebook entry, with the notepad number copied into the No. field. See "Storing a Phonebook Entry" on page 88.

Viewing and Resetting Call Timers

Your phone tracks and records call times. Use the recent calls menu to view and reset a call timer.

Network connection time is the elapsed time from the moment you connect to your service provider's network to the moment you end the call by pressing ☎. This time includes busy signals and ringing.

The amount of network connection time you track on your resettable timer may not equal the amount of time for which you are billed by your service provider. For billing information, please contact your service provider directly.

You can view the approximate network connection time elapsed during the following calls:

Timer	Description
Last Call	Time spent on the last call dialed or received. You cannot reset this timer.
Dialed Calls	Total time spent on dialed calls since the last time you reset this timer.
Received Calls	Total time spent on calls received since the last time you reset this timer.
All Calls	Total time spent on dialed and received calls since the last time you reset this timer.
Lifetime	Total time spent on all calls on this phone. You cannot reset this timer.

To view a call timer:

Find the Feature M > `Recent Calls`
> `Call Times`

Press	To
1 S	scroll to the timer you want to view
2 `SELECT` (+)	view the recorded time

To reset the call timer:

Press	To
1 `RESET` (+)	reset the time (if available)
2 `YES` (-)	confirm the reset

Viewing and Resetting Call Costs

Your phone network can provide the following cost information:

Cost Tracker	Description
`Credit Available`	Amount of your credit remaining. For GSM advice of charge, this is only available if you set a credit limit. **Note:** Your phone receives cost information from the advice of charge feature or third-party prepay software.

Cost Tracker	Description
Expiration Date	Date that the available credit expires (available only with a subscription to a prepay option).
Last Deposit	Amount of the last deposit (available only with a subscription to a prepay option).
Last Call	Amount spent on the last call you dialed or received. You cannot reset this cost tracker.
Dialed Calls	Amount spent on calls you dialed since the last time you reset this cost tracker.
Received Calls	Amount spent on calls you received since the last time you reset this cost tracker.
All Calls	Amount spent on all dialed and received calls since the last time you reset this cost tracker. You can reset this value separate from Dialed Calls and Received Calls, so Dialed Calls plus Received Calls may not equal All Calls.

To view a cost tracker:

Find the Feature M > Recent Calls > Call Cost

Press		To
1	⊕	scroll to the cost tracker you want to view
2	SELECT (⊙)	view the recorded cost

To reset the cost tracker:

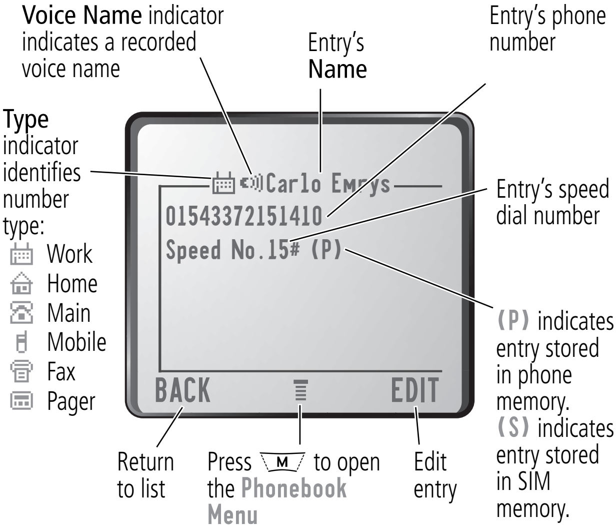
Press	To
1 RESET (↙)	reset the cost (if available)
2 OK (↘)	enter your PIN2 code to confirm the reset

Phonebook

You can store a list of names and phone numbers in your phone's electronic phonebook. You can view these entries and call them directly from your phone.

To see the list of names stored in your phonebook, press M > **Phonebook** from the idle display. Scroll to a name and press **VIEW** (⊙) to view details of the phonebook entry as shown in the following display.

Fields in a Phonebook Entry


Voice Name indicator indicates a recorded voice name
Entry's **Name**
Entry's phone number
Type indicator identifies number type:
Work
Home
Main
Mobile
Fax
Pager
Carlo Emrys
01543372151410
Speed No.15# (P)
BACK
EDIT
Entry's speed dial number
(P) indicates entry stored in phone memory. **(S)** indicates entry stored in SIM memory.
Return to list
Press M to open the **Phonebook Menu**
Edit entry

Note: Phonebook entries stored on the SIM card do not have **Type** or **Voice Name** information.

Storing a Phonebook Entry

A phone number is required for a phonebook entry. All other information is optional.

You can store a phonebook entry on your **phone** or on the **SIM card**. Entries with a speed dial number from 1 to 500 are stored on the phone. To store a phonebook entry on your SIM card, assign a speed dial number of 501 or higher to the entry when you create it. The total number of entries you can store on the SIM card is dependent on your service provider.

Shortcut: Enter a phone number in the idle display, then press STORE (+) to create a phonebook entry with the number in the No. field. Go directly to step 1 in the following procedure to enter additional information and store the entry.

Note: You can also use the following procedure to store a fixed dial entry by scrolling to and selecting Fixed Dial.

Enter Information

Find the Feature	M > Phonebook M > New

	Press	To
1	CHANGE (+)	select Name
2	keypad keys	enter a name for the phonebook entry (see “Entering Text” on page 53)
3	OK (+)	store the name
4	CHANGE (+)	select No.

Press	To
5 keypad keys	enter the phone number
6 OK (+)	store the phone number
7 CHANGE (+)	select Type **Note:** This option is not available for entries stored on the SIM card.
8 ✥	scroll to the type of phone number
9 SELECT (+)	select the number type
10 RECORD (+) **or** Go to step 11 if you do not want to record a voice name for the entry	record a voice name for the entry, if desired See "Recording a Voice Name For a Phonebook Entry" on page 91. **Note:** This option is not available for entries stored on the SIM card.
11 ✥	scroll to Speed No., the number to *speed dial* the entry The next available speed dial number is assigned to a new phonebook number by default.
12 CHANGE (+)	select Speed No. if you want to change it

Press		**To**
13	keypad keys	enter a different speed number, if desired **Note:** Entries with a speed dial number from 1 to 500 are stored on the phone. Entries with a speed dial number of 501 or higher are stored on the SIM card.
14	OK (⊙)	save the modified speed number If your chosen speed number is already assigned to another entry, you are asked if you want to replace that entry.
15	SELECT (⊙)	select MORE if you want to create another entry with the same Name **Note:** You must enter a name and number to use this option.

Complete Phonebook Entry

When you are finished entering information for a phonebook entry:

Press	**To**
DONE (⊙)	store the entry and return to the phonebook list

Recording a Voice Name For a Phonebook Entry

You can record a voice name when you create a new phonebook entry, or when you edit a previously stored phonebook entry. This lets you use voice dial to call the number without dialing (see "Voice Dial" on page 93).

Note: You cannot record a voice name for an entry stored on the SIM card.

Tip: Make your voice recording in a quiet location. Hold the phone about four inches (10 centimeters) from your mouth, and speak directly into the phone's microphone in a normal tone of voice.

Find the Feature M > Phonebook

Do This		To
1	Press ✥	scroll to the entry that needs a voice name
2	Press VIEW (⊙)	display the entry's detailed view
3	Press EDIT (⊙)	edit the phonebook entry
4	Press ✥	scroll to Voice Name
5	Press RECORD (⊙)	begin the recording process The phone displays Press Voice Key then say name.

	Do This	To
6	Press and release the voice key on the right side of your phone and say the entry's name (in two seconds)	record the voice name The phone displays `Press Voice Key then REPEAT name`.
7	Press the voice key and repeat the name	confirm the voice name The phone displays `Trained: Voice Name`.
8	Press `DONE` (⊙)	store the voice name

Dialing a Phonebook Entry

You can use the phonebook list, voice dial, speed dial, or 1-touch dial to call a number stored in your phonebook. To use speed dial, see "Dialing With Speed Dial" on page 38. To use 1-touch dial, see "Dialing With 1-Touch Dial" on page 38.

Phonebook List

To call a number in the phonebook list:

Find the Feature M > `Phonebook`

	Press	To
1	◈	scroll to the entry you want to call
2	☎	send the call

Voice Dial

To call a number using voice dial:

Do This	Result
Press and release the voice key on the right side of your phone and say the entry’s name (in two seconds).	Your phone goes to the entry in the phonebook list, repeats the voice name, waits two seconds, then automatically dials the call.

Editing a Phonebook Entry

You can edit a phonebook entry stored on your phone or the SIM card.

Notes:

- If you change an entry’s speed dial number, the entry is moved to the new speed dial location and the original entry is deleted. Entries with a speed dial number from 1 to 500 are stored on the phone. Entries with a speed dial number of 501 or higher are stored on the SIM card.
- You can also use the following procedure to edit a fixed dial entry by scrolling to and selecting `Fixed Dial`.

Find the Feature M > Phonebook

Press	To
1 ⊕	scroll to the entry you want to edit
2 `VIEW` (⊙)	display the entry’s detailed view
3 `EDIT` (⊙)	edit the phonebook entry

Edit a phonebook entry or fixed dial entry by following the procedures described in "Storing a Phonebook Entry" on page 88.

Deleting a Phonebook Entry

To delete a phonebook entry:

Find the Feature M > Phonebook

Press	To
1 ✥	scroll to the entry you want to delete
2 M	open the Phonebook Menu
3 ✥	scroll to Delete
4 SELECT (•)	select Delete
5 YES (•)	confirm the deletion

Copying Phonebook Entries Between the Phone and SIM Card

You can copy one or more phonebook entries from your phone to the SIM card or from the SIM card to your phone.

Notes:

- This procedure copies the original entry to a new location. It does *not* delete the original entry.
- The SIM card cannot store Type and Voice Name data for entries. If you try to copy an entry with a type or voice name to the SIM card, the phone asks you for confirmation before dropping this information and copying the entry.

Copy a Single Entry

To copy a single phonebook entry from your phone to the SIM card or from the SIM card to your phone:

Find the Feature M > Phonebook

Press	To
1 ✥	scroll to the entry you want to copy **Note:** Entries with a speed dial number from 1 to 500 are stored on the phone. Entries with a speed dial number of 501 or higher are stored on the SIM card.
2 M	open the Phonebook Menu
3 ✥	scroll to Copy Entry
4 SELECT (⊙)	select Copy Entry The phone displays the Copy To form, with the next available speed dial number.
5 keypad keys	edit the speed dial number on the Copy To form
6 OK (⊙)	approve the copy to the speed dial number The phone displays the Stored message. You can now delete the old phonebook entry, if desired.

Copy Multiple Entries

To copy multiple phonebook entries from your phone to the SIM card or from the SIM card to your phone:

Find the Feature M > Phonebook

Press		To
1	M	open the Phonebook Menu
2	✥	scroll to Copy Entries
3	SELECT (+)	select Copy Entries The phone displays the Copy Entries form.
4	✥	scroll to From (start)
5	CHANGE (+)	select From (start)
6	keypad keys	enter the first (lowest) speed dial number in the range of entries that you want to copy **Note:** Entries with a speed dial number from 1 to 500 are stored on the phone. Entries with a speed dial number of 501 or higher are stored on the SIM card.
7	OK (+)	store the number and return to the Copy Entries form
8	✥	scroll to From (end)
9	CHANGE (+)	select From (end)

Press		To
10	keypad keys	enter the last (highest) speed dial number in the range of entries that you want to copy
11	**OK** (+)	store the number and return to the **Copy Entries** menu
12	✣	scroll to **To (start)**
13	**CHANGE** (+)	select **To (start)**
14	keypad keys	enter the first (lowest) new speed dial number for the entries’ new location
15	**OK** (+)	store the number and return to the **Copy Entries** menu
16	**DONE** (-)	copy the entries The phone displays the **Copied Entries** message. You can now delete the old entries, if desired.

Checking Phonebook Capacity

You can check phonebook capacity to see how much memory space is left for storing phonebook entries on your phone and on the SIM card. For entries stored on the phone, your phone displays a memory meter that shows how much memory space remains to store phonebook and datebook entries. For the SIM card, your phone lists the number of phonebook entries used and the number available.

Find the Feature M > **Phonebook**

Press		To
1	M	open the Phonebook Menu
2	✥	scroll to Phone Capacity or SIM Capacity
3	SELECT (+)	select Phone Capacity or SIM Capacity Your phone displays the phone memory meter, or the number of SIM card phonebook entries available.

Synchronizing with TrueSync Software

Optional Accessory

You can synchronize phonebook entries between your phone and computer or hand-held device with Starfish TrueSync® software, a Motorola accessory product. See the TrueSync user guide for more information.

Note: TrueSync software is designed to synchronize with basic features of many popular Personal Information Management (PIM) software and hardware products.

Setting Up the Phonebook

You can specify the sort order for your phonebook entries and the location of your 1-touch dial entries.

Phonebook List Sort Preference

You can set up your phone to sort your phonebook list by speed dial number (the standard), name, or voice dial.

Tip: The voice dial sort is identical to the name sort, except that the entries with voice name tags appear first.

Find the Feature M > `Phonebook`

Press		To
1	M	open the `Phonebook Menu`
2	✣	scroll to `Setup`
3	`SELECT` (•)	select `Setup`
4	✣	scroll to `Sort by`
5	`CHANGE` (•)	select `Sort by`
6	✣	scroll to the entry you want
7	`SELECT` (•)	select the entry you want

1-Touch Dial Preference

Your phone lets you specify whether your 1-touch dial entries are located on the phone or the SIM card:

Find the Feature M > `Settings`
> `Other Settings`
> `Initial Setup`

Press		To
1	✣	scroll to `1-Touch Dial`
2	`CHANGE` (•)	select `1-Touch Dial`
3	✣	scroll to the list you want
4	`SELECT` (•)	select the list you want

Datebook

The datebook is a calendar that lets you schedule and organize events such as appointments and meetings. You can review your schedule of events for the week or by the day, and have the datebook play a reminder alarm for specific events.

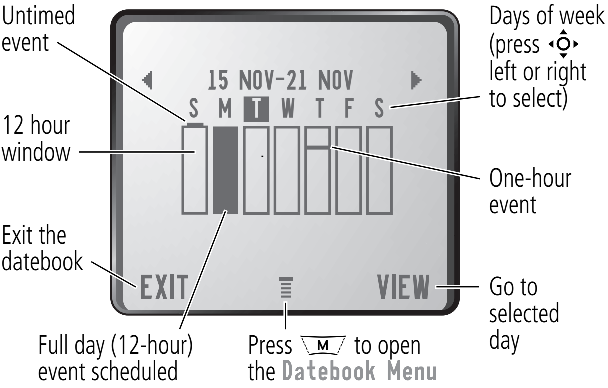
Note: You must set the correct time and date in order to use the datebook. Use the `Time and Date` option (see page 75) to set the time and date.

To schedule or review events in the datebook:

Find the Feature	M > `Datebook`

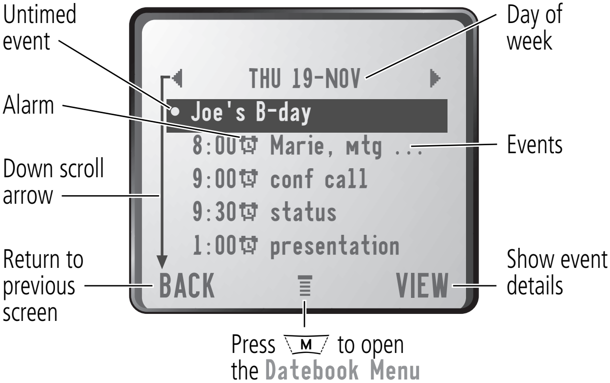
Week View

When you open the datebook, your phone displays a calendar for the week. Lines or filled boxes under each day indicate scheduled events.


Untimed event
12 hour window
Exit the datebook
15 NOV-21 NOV
S M T W T F S
EXIT
VIEW
Days of week (press left or right to select)
One-hour event
Go to selected day
Full day (12-hour) event scheduled
Press M to open the Datebook Menu

Day View

Select a day in the week view and press **VIEW** (+) to see the day's events. You can store, edit, view, copy, and delete any event from the day view.



THU 19-NOV

Joe's B-day

8:00 Marie, mtg ...

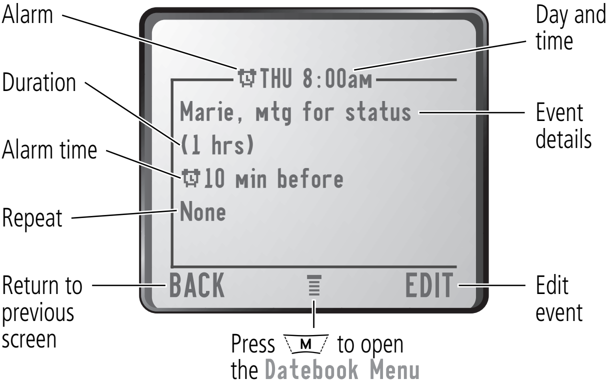
9:00 conf call

9:30 status

1:00 presentation

Event View

Select an event in the day view and press VIEW (+) to open the detailed event view. You can edit, copy, and delete events from the event view.



THU 8:00am
Marie, mtg for status
(1 hrs)
10 min before
None
BACK EDIT

Storing a New Event

A title is required for a datebook event. All other information is optional.

Find the Feature M > Datebook > *day*
M > New

See "Selecting a Feature Option" on page 49 for instructions on scrolling to and selecting options.

Press	To
1 CHANGE (+)	select Title

Press		To
2	keypad keys	enter a title for the event (see “Entering Text” on page 53)
3	OK (+)	store the event title
4	S	scroll to other fields and enter information as necessary Other fields let you enter start time, duration, date, repeating events, and reminder alarm.
5	DONE (-)	store the new event and return to the day view

Changing Event Information

To change information about an existing event:

Find the Feature M > Datebook

Press		To
1	S left or right	scroll to the scheduled event day
2	VIEW (+)	display the day view
3	S	scroll to the event you want to change
4	VIEW (+)	display the event view
5	EDIT (+)	edit the event
6	S	scroll to the detail you want to change
7	CHANGE (+)	edit the information
8	keypad keys	enter the new information

Press	To
9 DONE (-)	store the information and return to the day view

Copying an Event

To copy information from a current event to a new event:

Find the Feature M > Datebook

Press	To
1 ✥ left or right	scroll to the scheduled event day
2 VIEW (+)	display the day view
3 ✥	scroll to the event to copy
4 M	open the Datebook Menu
5 ✥	scroll to Copy
6 SELECT (+)	copy the event
7 YES (-)	confirm the copy Your phone assumes that you want to change the date, and displays the Date field.
8 keypad keys	enter the date information
9 ▶ (+) **or** ✥ to the right	move to the month, day, and year
10 DONE (-)	save the copy of the event
11 ✥	scroll to event details and edit the information as necessary

Press	To
12 DONE (−)	store the new event and return to the day view

Deleting an Event

Find the Feature M > Datebook

Press	To
1 ✥ left or right	scroll to the scheduled event day
2 VIEW (+)	display the day view
3 ✥	scroll to the event to delete
4 M	open the Datebook Menu
5 ✥	scroll to Delete
6 SELECT (+)	select Delete For non-repeating events, go to step 7. For repeating events, the phone displays a delete event menu:
a ✥	scroll to This Event Only or Repeat Events
b SELECT (+)	select the event(s) to delete
7 YES (−)	confirm the deletion The phone briefly displays a Deleted: message and returns you to the day view.

Radio

You can use your phone to tune, store presets, and listen to FM radio stations when the optional Motorola Original™ FM Stereo Radio Headset accessory is plugged into the phone's accessory connector port.

Turning the Radio On and Off

Press	To
Radio (⌐)	turn the radio on and off

Alternatively, you can use the following procedure:

Press		To
1	M	open the menu
2	⌖	scroll to **Radio**
3	**On** (⌐) or **Off** (⌐)	turn the radio on or off

Note: The **Radio** (⌐) soft key option and **Radio** menu feature are displayed only when the FM Stereo Radio Headset is plugged into the accessory connector port.

Tuning a Station

Do This	To
Press ⌖	scroll up or down to the next frequency
or	
Press and hold ⌖	scroll up or down to the next available stereo station

Storing a Preset

To store a station to a preset that you can recall later:

Do This	To
Press and hold a number key (1 to 9wxyz)	assign its preset number to the tuned station

Selecting a Preset

To select a preset radio station:

Press	To
a number key (1 to 9wxyz)	tune the station stored at that preset location

Sending and Receiving Calls With the Radio On

Your phone interrupts the radio signal and rings or vibrates as usual to notify you of an incoming call, message, or other event. When you receive a call:

Do This	To
Press IGNORE (-)	ignore the call
Press ANSWER (-) **or** Press the button on the FM Stereo Radio Headset microphone	answer the call **Note:** You can use the FM Stereo Radio Headset microphone to converse with the other party during a call

To end the call and resume the FM broadcast:

Do This	To
Press ☎ **or** Press and hold the button on the FM Stereo Radio Headset microphone	end the call

Turn the radio off before dialing outgoing calls from the phone keypad. You do not have to turn off the FM radio feature to dial emergency numbers, or numbers selected from your phonebook or other lists.

Tip: To dial a recently called number, press ☎ or the button on the FM Stereo Radio Headset microphone to go to the dialed calls list. For more information, see "Recent Calls" on page 79.

Messages—Voicemail

You can listen to your voicemail messages by calling your network voicemail phone number. Voicemail messages are stored on the network—not on your phone. Contact your service provider for more details.

Storing Your Voicemail Number

Store your voicemail number in your phone to make it faster and easier to use voicemail. Your voicemail number is provided by your service provider.

Find the Feature M > Messages
M > VoiceMail Setup

	Press	To
1	keypad keys	enter the phone number for your voicemail
2	OK (⁄)	store the number

Receiving a New Voicemail Message

When you receive a voicemail message, your phone displays the ✉ (voice message waiting) indicator and a New VoiceMail notification. (Some networks only indicate when you have messages, whether they are new or not.) If reminders are turned on, your phone sends a reminder every five minutes until you close the new message notification, listen to the message, or turn off your phone. (See "Reminders" on page 148.)

From the new message notification:

Press	To
CALL (⊙)	call your voicemail phone number and listen to the message

Listening to a Voicemail Message

To listen to your voicemail messages at any time:

Find the Feature M > Messages > VoiceMail

Your phone calls the voicemail phone number you stored. If you do not have a voicemail number stored, the phone guides you through storing a number.

Messages—Text

Text messages are brief messages that you can send and receive (such as `Where are we meeting?`). Received messages appear on your phone display or in your text message inbox.

Quick notes are pre-written text messages that you can customize and send quickly.

You must set up the text message inbox *before* you can send and receive these messages. The total number of messages the inbox can hold depends on the length of the messages, and the number of other messages and drafts stored on your phone.

Note: Your service provider may have already programmed the text message inbox settings for you.

Setting Up the Text Message Inbox

Find the Feature M > `Messages`
M > `Text Msg Setup`

	Press	To
1	`CHANGE` (•)	change the `Srvce Center No.` which is provided by your service provider
2	keypad keys	enter the phone number for the service center that handles your outgoing messages
3	`OK` (•)	store your service center number
4	`CHANGE` (•)	change the `Expire After` period

Press	To
5 keypad keys	enter the expiration period—the number of days your network tries to send unreceived messages
6 OK (⊡)	store the expiration period
7 CHANGE (⊡)	change the Reply Type
8 ◈	scroll to the default type of replies you want to send—SMS text messages, or other formats
9 OK (⊡)	store the reply type
10 CHANGE (⊡)	change the Cleanup setting
11 ◈	scroll to the number of days that messages should stay in your inbox, or the number of messages that should be kept in your inbox
12 SELECT (⊡)	select the cleanup setting If you select Custom, continue. Otherwise, go directly to step17 to complete the procedure.
13 ◈ up or down	scroll to the number of days or messages
14 ▶ (⊡) **or** ◈ to the right	move to the type identifier
15 ◈ up or down	scroll to days or msgs
16 DONE (⊡)	store the custom cleanup period

Press	To
17 DONE (⏷)	save the text message inbox settings

Receiving a Text Message

Note: You must set up the text message inbox before you can receive text messages. See "Setting Up the Text Message Inbox" on page 111.

When you receive a new message, your phone displays the ✉ (message waiting) indicator and a New Message notification, and gives an alert. If reminders are turned on, your phone sends a reminder every five minutes until you close the new message notification, read the message, or turn off your phone. (See "Reminders" on page 148.)

From the new message notification:

Press	To
READ (⏷)	open the message (or your text message inbox if there are multiple messages)

As memory space for storing messages gets close to full, the ✉ (message waiting) indicator flashes and your phone displays Memory is Low! when you receive a new message. When no more messages can be stored, your phone displays Memory is Full! and the network temporarily holds your new messages. To receive these new messages, you must delete some existing messages from your inbox, outbox, or drafts folder.

Reading, Locking, or Deleting a Text Message

You can open your text message inbox to read, lock, or delete messages at any time.

Messages in the text message inbox are sorted from newest to oldest. The oldest messages are deleted automatically as specified by the inbox cleanup setting (see "Setting Up the Text Message Inbox" on page 111). If you want to save a message, you should lock it to prevent it from being deleted during cleanup.

Find the Feature M > Messages > Text Msgs

Press	To
1 ◆	scroll to the message you want (✉ = read, 🔒 = read and locked)
2 READ (–)	open the message
3 SAVE (–)	close the message without changes
or	
DELETE (–)	delete the message
or	
M	open the Text Msg Menu to perform other procedures as described in the following list

The **Text Msg Menu** includes the following options:

Option	Description
Call Back	Call the number listed in the message header or embedded in the message text. If more than one number is embedded, you can select one from a list.
Go To	Launch the micro-browser and go to a Web address (URL) embedded in the message. If more than one URL is embedded, you can select one from a list.
Reply	Open a new text message, with the message's **Reply To** number in the **To** field.
Forward	Open a copy of the text message, with an empty **To** field.
Lock/Unlock	Lock or unlock the message.
Store Number	Open a new phonebook entry with the message's embedded number in the **No.** field. If more than one number is embedded, you can select one from a list.
Delete or **Delete All**	Delete the message or all inbox messages. Press **Yes** (•) to confirm the deletion.
Create Message	Open a new text message.
Setup	Open the text message inbox setup menu.

Sending a Text Message

You can create and send a text message to one or more recipients. The text message feature lets you manually enter each recipient's phone number, or select one or more numbers from the phonebook or recent calls lists.

When you manually enter phone numbers in the **To** field, you must insert a space between each phone number. Press and hold 1 to insert a space as needed.

Note: If you receive and answer a call while composing a text message, your phone stores the message in the drafts folder and closes the message editor. Your message is also stored in the drafts folder if you respond to a missed call notification while using the message editor.

Find the Feature M > Messages
M > Create Message

Press	To
1 CHANGE (+)	select To

Press		To
2	keypad keys	enter one or more phone numbers where you want to send the message **Tip:** Remember to press and hold 1 to insert a space between each phone number that you enter manually.
	or	
	BROWSE (◹)	select one or more phone numbers from the phonebook or recent call lists
3	OK (◹)	store the number(s)
4	CHANGE (◹)	select Msg
5	keypad keys	enter the text message (see "Entering Text" on page 53) **Note:** Message length is limited. When 40 or fewer characters remain, a two-digit counter at the top of the display shows how many are left.
6	OK (◹)	store the text message
7	DONE (◸)	finish the message Your phone displays Send Message Now?

Press		To
8	YES (•)	send the message
	or	
	NO (•)	cancel the message or save it as a draft A saved message is stored in the drafts folder, where you can edit it and send it at a later time.

Sending a Quick Note Text Message

Quick notes are short, pre-written text messages that you can select, edit, and send quickly (for example, Meet me at ...). You can also create new quick note messages and store them for later use.

To send a quick note message:

Find the Feature M > Messages > Quick Notes

Press		To
1	◆	scroll to the quick note
2	READ (•)	read the quick note
	or	
	M	open the Quick Note Menu to perform other procedures as described in the following list

The **Quick Note Menu** includes the following options:

Option	Description
New	Open an editor where you can create a new quick note. Enter text and press **OK** (•) to save it as a quick note.
Edit	Open an editor where you can edit the selected quick note. Edit the quick note text and press **OK** (•) to save your changes.
Delete	Delete the selected quick note.
Send	Open a new message, with the selected quick note text in the **Msg** field. Complete the other fields in the message (for details, see "Sending a Text Message" on page 116). To send the quick note to multiple recipients, enter multiple phone numbers in the **To** field as described in step 2 of the procedure for "Sending a Text Message" on page 117.

Viewing the Status of Sent Text Messages

Text messages that you send are stored in the outbox. To view the contents of your outbox:

Find the Feature M > Messages > Outbox

Messages are sorted from newest to oldest. The following icons indicate message status:

≫ = sending in progress

✕ = sending failed

✉ delivered

Shortcuts

Your phone includes several pre-programmed shortcuts. You can create additional shortcuts, if you like, to mark frequently used menu items.

Standard Shortcuts

The following shortcuts are pre-programmed in your phone. You cannot edit or delete these shortcuts.

Do This	To
Press M, then press and hold M (within two seconds)	zoom in/out your phone's display view (See "Changing the Zoom Setting" on page 30.)
Press M *	lock/unlock your keypad
Press M #	display your phone number
Press ☎	go to the dialed calls list (See "Recent Calls" on page 79.)
Press ☎	exit the menu system and return to the idle display

User-Settable Shortcuts

You can create shortcuts to many menu features and applications. A shortcut takes you directly to the menu item, or performs the menu action (if applicable).

Creating a Shortcut

You can assign a keypad shortcut, or both a keypad shortcut *and* a voice shortcut to a menu item.

A voice shortcut lets you go directly to a menu item by saying its shortcut name.

Tip: Make your voice recording in a quiet location. Hold the phone about four inches (10 centimeters) from your mouth, and speak directly into the phone's microphone in a normal tone of voice.

Do	This	To
1	Press M	enter the menu system
2	Scroll to the item to which you want to assign a shortcut	highlight the menu item
3	Press and hold M	open the shortcut editor The phone displays: Assign Shortcut for: "*Item*"? where *Item* is the name of the item you selected.
4	Press YES (•)	view shortcut options

Do This	To
5 Press CHANGE (+)	change the keypad shortcut number, if necessary
or	
Press DONE (-)	select the default keypad shortcut number and close the shortcut editor if you do not want to assign a voice shortcut
or	
Press ✥	scroll to Voice if you want to assign a voice shortcut
6 Press RECORD (+)	begin the recording process The phone displays Press Voice Key then say voice shortcut.
7 Press and release the voice key on the right side of your phone and say the shortcut's name (in two seconds)	record the shortcut name The phone displays Press Voice Key then REPEAT voice shortcut.
8 Press and release the voice key and repeat the name	confirm the shortcut name The phone displays Trained: Voice Shortcut
9 Press DONE (-)	store the shortcut name and close the shortcut editor

Using Shortcuts

You can use a shortcut from the idle display, while on a call, or while scrolling through a menu.

Use a Keypad Shortcut

If you know the shortcut number:

Press		To
1	M	open the menu
2	the shortcut’s number	go to the menu item, or perform the menu action

Select a Shortcut From the List

To select a shortcut from the shortcut list:

Find the Feature M > Shortcuts
> *the shortcut you want*

Use a Voice Shortcut

To use a voice shortcut:

Do This		To
1	Press M	open the menu
2	Press and release the voice key on the right side of your phone and say the shortcut’s name (in two seconds)	go to the menu item, or perform the menu action

Voice Notes

The voice note feature lets you record personal messages or phone calls. You can play back a voice note at any time. There are no pre-recorded voice notes on your phone.

Recording a Voice Note

Use this procedure to record a voice note when the idle display is visible, or use it during a phone call to record the call. Your phone plays an alert tone to notify the other party that the call is being recorded.

Note: Recording phone calls is subject to varying state and federal laws regarding privacy and recording of conversations.

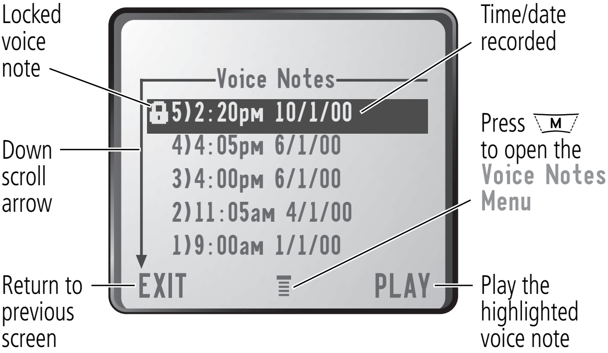
Tip: Make your voice recording in a quiet location. Hold the phone about four inches (10 centimeters) from your mouth, and speak directly into the phone's microphone in a normal tone of voice.

Do This		Result
1	Press and hold the voice key on the right side of your phone for the duration of the recording.	A tone sounds in the earpiece and the phone displays the `Recording Voice Note` message.
2	Speak your voice note into the phone while continuing to hold the voice key.	The phone records your voice note and displays a recording timer.
3	Release the voice key to stop recording.	The phone displays the voice notes list number and the total recording time.

Viewing the Voice Notes List

The voice notes list shows all your voice notes along with other important information and features.

Find the Feature M > Voice Notes



New Voice Note appears at the end of the list or by itself if no voice notes are stored. Select New Voice Note to view instructions on how to record a new voice note.

Playing a Voice Note

Find the Feature M > Voice Notes

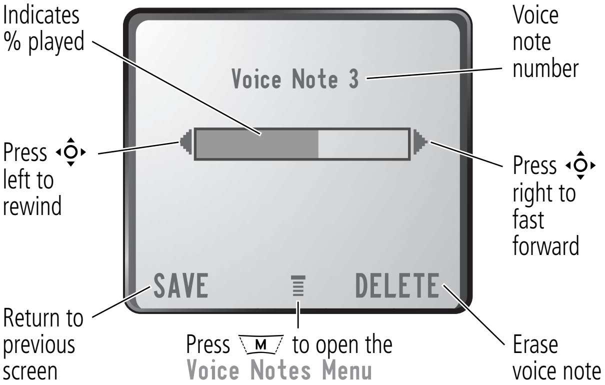
Press	To
1 ✥	scroll to the voice note
2 PLAY (+)	play the voice note

When an optional Motorola Original™ headset accessory or FM Stereo Radio Headset accessory is connected to your phone, voice note playback is automatically routed to the headset.

Tip: You can play a voice note while taking a call. It will not be transmitted to the other party.

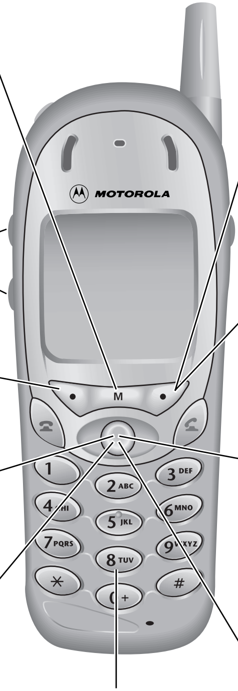
Playback Screen

While the voice note is playing, the playback screen is displayed.



Voice Note Controls

While playing back a voice note, press these keys to do the following:



Stop playback and go to `Voice Notes Menu`.

Raise or lower playback volume of voice note.

Stop playback and return to voice notes list.

Press **up/down** to stop playback and scroll to next voice note.

Press **left** to rewind three seconds, resume playing.
Press **left and hold** to rewind to the beginning

Press any number key to alternately stop and start playback.

If the voice note is unlocked, stop playback and display `Delete Voice Note?`

If the voice note is locked, stop playback and unlock voice note.

Press **right** to fast forward three seconds, resume playing.
Press **right and hold** to fast forward to end.

When playback is complete, press **right** to restart.

Locking and Unlocking a Voice Note

You can prevent a voice note from being accidentally deleted by locking it. To delete a locked voice note, you must first unlock it.

Find the Feature M > Voice Notes

Press		To
1	◈	scroll to the voice note you want to lock or unlock
2	M	open the Voice Notes Menu
3	◈	scroll to Lock or Unlock
4	SELECT (•)	lock or unlock the voice note

You can also lock or unlock a voice note while playing it back. When the playback screen is displayed:

Press		To
1	M	open the Voice Notes Menu
2	◈	scroll to Lock or Unlock
3	SELECT (•)	lock or unlock the voice note

Playback stops when you lock or unlock a voice note. Press any number key to resume playback.

Deleting a Voice Note

You can delete a single unlocked voice note or all unlocked voice notes. To delete a locked voice note, you must first unlock it. See "Locking and Unlocking a Voice Note" on page 129.

Find the Feature M > Voice Notes

Press	To
1 ◈	scroll to the voice note you want to delete
2 M	open the Voice Notes Menu
3 ◈	scroll to Delete or Delete All
4 SELECT (⊙)	select the highlighted option The phone displays Delete Voice Note X?, or Delete All Voice Notes?
5 YES (⊙)	delete the selected voice note, or delete all voice notes

Notes:

- You can always press NO (⊙) to cancel deletion.
- A deleted voice note cannot be recovered.

Micro-Browser

The micro-browser lets you access Web pages on your phone. Contact your service provider to set up access, if necessary.

Note: Your phone may be configured to use a high-speed GPRS (General Packet Radio Service) network connection. This type of connection can be identified by a 🄶 or GPRS indicator in the idle display that disappears when you start a micro-browser session. If a ☎ (connected call) indicator is displayed when you start a micro-browser session, your phone is using a standard voice channel connection. The type of network connection your phone uses depends on your service provider's network. Your network connection charges may vary depending on the type of connection used.

Starting a Micro-Browser Session

To open the micro-browser:

Find the Feature M > Browser

The micro-browser displays the home page set up by your service provider.

Press	To
1 ✥	scroll to a bookmark or service
2 SELECT (⌐)	select the service

Shortcut: If you open a text message with a Web address (URL) embedded in it, you can select M > Go To to launch the micro-browser and go directly to the URL. If more than one URL is embedded, you can select one from a list.

If you are unable to establish a network connection with the micro-browser, contact your service provider.

Interacting With Web Pages

You can perform the following operations on a Web page:

Do This	To
Press ✥	scroll through a text message
Press ✥ and then **SELECT** (⊙)	scroll through and select items in a list
Press keypad keys and then **OK** (⊙)	enter requested information **Tip:** Press ⊛ to delete one letter at a time if you make a mistake.
Press ✥ to scroll to a phone number on a Web page, then press ☎	call the number from the micro-browser
Press ⊛	go back to the previous Web page
Press M	open the **Browser Menu**

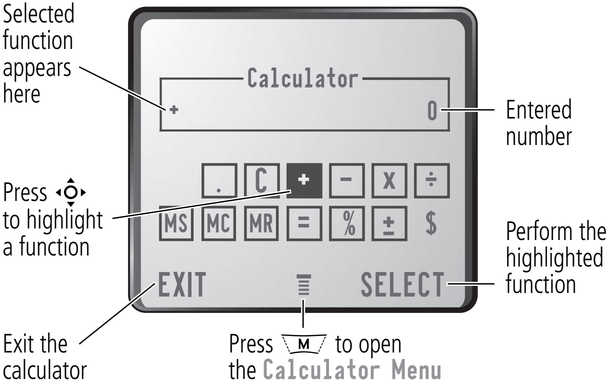
Calculator

You can use your phone as a convenient calculator and currency converter.

Calculating Numbers

Find the Feature M > `Calculator`

	Press	To
1	number keys	enter a number in the calculator
2	✥	highlight a calculator function
3	`SELECT` (⌐)	perform the highlighted function


Selected function appears here
Calculator
+
0
Entered number
. C + − X ÷
MS MC MR = % ± $
Press ✥ to highlight a function
EXIT
SELECT
Perform the highlighted function
Exit the calculator
Press M to open the Calculator Menu

The calculator can perform the following functions:

Function	Description
.	Insert a decimal point
C	Clear the calculation
CE	Clear entry (replaces the C function when you enter subsequent values in a calculation)
+	Add
-	Subtract
x	Multiply
÷	Divide
MS	Store the current value in memory (overwrites values already stored)
MC	Clear the value stored in memory
MR	Replace the displayed value with the value stored in memory
=	Calculate the result
%	Divide the displayed value by 100
±	Change the entry’s sign (positive/negative)
$	Calculate the exchange rate

Converting Currency

The currency converter works just like the calculator, but uses the $ (currency) function:

Find the Feature M > Calculator
M > Exchange Rate

	Press	To
1	number keys	enter the exchange rate
2	OK (•)	store the exchange rate
3	number keys	enter the amount to convert (amount to multiply by the exchange rate)
4	✥	highlight the $ function
5	SELECT (•)	perform the conversion

Games

Your phone contains three games that you can play between phone calls. If you get an incoming call, message, alarm, or alert, the game ends automatically.

Selecting and Starting a New Game

Find the Feature M > Games

Press	To
1 ✥	scroll to the game of your choice
2 SELECT (+)	start the game

When the game is over, you can play another session of the same game or return to the games menu.

Press	To
BACK (-) **or** NO (-)	return to the games menu
NEW (+) **or** YES (+)	start another session of the game you just played

Ending a Game

You can end a game at any time.

Press	To
BACK (⊡) **or** ☎	end the game session and return to the games menu

Playing a Game

Blackjack

In this classic Las Vegas card game, you play against the dealer to see who can get closer to 21 points without going over.

Rules of the game

- With each new hand, the first card is dealt to the dealer. The dealer's cards are shown at the top of the display, and your cards are shown at the bottom.
- All face cards count as 10 points.
- All number cards count as the points shown on their face.
- An Ace counts as 11 points, unless that would put you over 21 points. Otherwise, an Ace is counted as 1 point. An Ace that was originally counted as 11 may later be counted as 1 point if it will bring your points under or equal to 21 points.
- An initial deal of an Ace and a card with a face value of 10 points counts as exactly 21 points or Blackjack.

- Blackjack automatically wins against any other hand that totals 21 points.
- If you score more than 21 points, you go “bust” or lose.
- If you get five cards without going bust, you win.
- If you and the dealer have the same score, the dealer wins.
- You can ask for a “hit” or another card as long as you do not go bust.
- As long as the dealer’s total is less than 17 points, the dealer must continue to take a hit.

How to Play

When the game begins, you are dealt two cards. Based on their total face value, you can:

Press	To
STAY (⊙)	see the results of the hand
HIT ME (⊙)	request another card

Mindblaster

Your goal is to guess a secret four-symbol code. You play by entering symbols into four spaces and then submitting a guess.

Rules of the Game

- Your score is the number of guesses it takes to reveal the secret code.
- When you submit a guess, you are given clues that indicate how many symbols you have identified correctly and how many are in the correct position. The position of the clues does *not* correspond to the location of the symbols.

  ■ = correct symbol in correct position

  ⬓ = correct symbol in wrong position

- You can see a history of your last 10 guesses.
- Once you enter a symbol into a blank space, you can change the symbol but you cannot make the space blank again.
- When you correctly guess the four-symbol code, the display shows your score and the level of your next game.
- After you win one game, you progress from level 1 to level 2.
- After you win two more games, you progress from level 2 to level 3.
- When you exit the game or turn off the phone, you begin again at level 1.

How to Play

When the game begins, you see four blank spaces. To play the game:

Do This	To
Press ✣ left or right	move from space to space
Press ✣ up or down	place a symbol in a space
Press GUESS (⌐)	submit a guess (when all four spaces contain symbols)
Select ⬍ and then press ✣ up or down	scroll through and view a history of your last 10 guesses

Paddleball

In this test of endurance, your mission is move your paddle to strike a bouncing ball. The more you succeed, the smaller your paddle gets.

Rules of the game

- Your score is the number of times your paddle hits the ball.
- You lose when the paddle misses the ball.

How to play

Press	To
✣ up or down	move your paddle so that it hits the bouncing ball

Adjusting Your Settings

You can adjust a wide variety of phone settings to suit your needs.

Ring/Vibrate

Your phone rings or vibrates to notify you of an incoming call, message, or other event. This ring or vibration is called an *alert*. You can select one of five different alert profiles:

- Loud ring
- Vibrate
- Silent
- Soft ring
- Ring and vibrate

The alert setting indicator in your display shows the current alert profile (see illustration on page 28).

Each alert profile contains settings for ringer and keypad volume. It also includes alert tone settings for different events: incoming calls, text messages, voicemail messages, data calls, fax calls, alarms, and reminders. You can modify the settings in each profile.

Select an Alert Profile

Find the Feature	M > `Settings` > `Ring/Vibrate` > `Alert`

Press	To
1 ✥	scroll to the alert profile you want to use

Press	To
2 `SELECT` (+)	select the alert profile The phone displays the `Changed: Alert` message.

Customize an Alert Profile

You can customize a profile by changing the alerts used for specific events (such as incoming calls, text messages, etc.). Your phone includes a variety of preset alert tones and vibrations. Any changes you make are saved to the current alert profile.

Tip: This feature also lets you set the profile’s ringer volume and keypad volume.

Find the Feature	M > `Settings` > `Ring/Vibrate` > *Alert* `Detail`

Press	To
1 ✛	scroll to the event for which you want to set a new alert
2 `CHANGE` (+)	select the event The phone displays the list of available alerts.
3 ✛	scroll to the alert you want for the event
4 `SELECT` (+)	select the alert The phone displays the `Changed:` *Event Alert* message.

Use the My Tones Feature

You can create up to 32 custom alert tones for your phone. The tones you create appear in the list of available alerts (see "Customize an Alert Profile" on page 142).

Creating a Tone

Find the Feature M > Settings > Ring/Vibrate
> My Tones

	Press	To
1	S	scroll to [New Tone]
2	SELECT (+)	select [New Tone]
3	CHANGE (+)	select Notes
4	keypad keys	enter notes for the tone (see "Entering Notes" on page 144)
5	OK (+)	store the notes
6	CHANGE (+)	select Name
7	keypad keys	enter the name for the tone
8	OK (+)	store the name
9	DONE (-)	store the tone

Entering Notes

To create a new tone, use the keypad keys to enter each note. Press a key multiple times to cycle through its available notes or options (pitch, octave, or length). The default setting for a new tone is a quarter note in octave two.

Key	Phone Display	Description
1	1	set octave one
	2	set octave two
	3	set octave three
2ABC	A	note A
	B	note B
	C	note C
3DEF	D	note D
	E	note E
	F	note F
4GHI	G	note G
	R	rest
7PQRS	#	sharp
	b	flat
0+	q	quarter note or quarter rest
	h	half note or half rest
	w	whole note or whole rest

Enter a note as follows:

Task	Action
Change the octave	Set the new octave (**1**, **2**, or **3**) *before* selecting the note. The new octave applies to the note and all following notes until you change it again.
Select the note (required)	Press a keypad key to enter a note.
Change a note to a sharp or flat	Enter a sharp or flat (**#** or **b**) *after* selecting the note. Some sharps and flats are played as standard notes. For example, **B#** is the same as **C**. Press ✥ to scroll to valid notes when entering a new note.
Change a note's length	Set the new length (**q**, **h**, or **w**) *after* selecting the note. The new length applies to the note and all following notes until you change it again.
Add a rest	Enter one or more rests (**R** characters) as needed in the tone sequence. You can set the length of the rest by entering a **q**, **h**, or **w** character *after* the rest, just as you can for a note.
Listen to a new tone as you compose it	Press M to enter the **Compose Menu**, and select **Play All** to play the notes you have entered.

Example

Press the following keys to play this sequence of notes and rests in octave three: **C** (quarter note), **E flat** (quarter note), **half rest**, and **G** (whole note):

Press		To	Phone Display
1	1 1 1	set octave three	3
2	2ABC 2ABC 2ABC	enter a quarter note **C**	C
3	3DEF 3DEF 7PQRS 7PQRS	enter a quarter note **E flat**	Eb
4	4GHI 4GHI 0+ 0+	enter a **half rest**	Rh
5	4GHI 0+ 0+ 0+	enter a whole note **G**	Gw

Playing a Tone

Find the Feature M > Settings > Ring/Vibrate > My Tones

Press		To
1	✥	scroll to the tone you want to play
2	M	open the My Tones Menu
3	✥	scroll to Play
4	SELECT (⊙)	select Play The phone displays the playback meter and plays the tone.

Press		To
5	PLAY (+)	play the tone again
	or	
	CANCEL (-)	return to the my tones list

Editing a Tone

You cannot edit the standard alert tones included with your phone. To edit a custom tone that you created:

Find the Feature M > Settings > Ring/Vibrate
> My Tones

Press		To
1	◈	scroll to the tone you want to edit
2	EDIT (+)	open the tone details
3	◈	scroll to the details you want to edit (Name or Notes)
4	CHANGE (+)	select the details you want to edit
5	keypad keys	enter new text or notes (see "Entering Notes" on page 144)
6	OK (+)	store the details

Deleting a Tone

You cannot delete the standard alert tones included with your phone. To delete a custom tone that you created:

Find the Feature M > Settings > Ring/Vibrate
> My Tones

Press	To
1 ✥	scroll to the tone you want to delete
2 M	open the My Tones Menu
3 ✥	scroll to Delete
4 SELECT (⊙)	select Delete
5 YES (⊙)	confirm the deletion

Reminders

A reminder is an alert that rings or vibrates every five minutes to notify you about a voicemail or text message that you have received, or a datebook event that you have scheduled.

To set or turn off reminders:

Find the Feature M > Settings > Ring/Vibrate
> *Alert* Detail > Reminders

Press	To
1 ✥	scroll to the reminder alert you want: Beep, Vibrate, or Off Beep or Vibrate sets the corresponding reminder alert type. Off turns off all reminders.
2 SELECT (⊙)	select the reminder alert

Call Forwarding

Network/Subscription Dependent Feature

Call forwarding sends your phone's incoming voice, fax, and/or data calls directly to another phone number. Use call forwarding options to specify which calls your phone should forward. When you are ready to accept calls on your phone again, you can turn off call forwarding.

Set Up or Cancel Call Forwarding

The call forwarding options for voice, fax, or data calls are:

All Calls	forwards all calls
If Unavailable	forwards calls if your phone is unavailable
Detailed	uses different forwarding numbers if you are out of range, unable to answer, or busy (*voice calls only*)
Off	does not forward calls

Find the Feature M > Settings > Call Forward

Press	To
1 ◈	scroll to the type of calls you want to forward (Cancel All cancels all call forwarding and ends the procedure.)
2 SELECT (+)	open the call forward details for that call type
3 ◈	scroll to Forward

Press	To
4 CHANGE (⊙)	change the Forward option
5 ✥	scroll to the call forward option you want
6 SELECT (⊙)	store the option
7 ✥	scroll to To (for Detailed forwarding, scroll to If Busy, If No Answer, or If Unreachable)
8 CHANGE (⊙)	change the phone number
9 keypad keys	enter the forwarding phone number
or	
BROWSE (⊙)	browse through your phonebook or other lists for the forwarding phone number
10 OK (⊙)	store the forwarding phone number

Note: You can repeat this procedure to enter forwarding information for other call types.

Check Call Forwarding Status

Your network may store call forwarding status for you. If you change your phone's call forward settings (see "Set Up or Cancel Call Forwarding" on page 149), then you should confirm that the network call forward status matches your preferences.

Find the Feature	M > Settings > Call Forward > Forward Status

Press		To
1	S	scroll to Voice, Fax, or Data calls
2	View (+)	confirm that the network settings are correct

Reordering Menu Items

You can customize the order of the items in your phone's main menu, depending upon your usage.

Find the Feature	M	> Settings > Other Settings > Personalize > Main Menu

Press		To
1	S	scroll to the menu item you want to move
2	GRAB (+)	grab the menu item you want to move
3	S	move the item up or down the menu
4	INSERT (+)	insert the item in the new location

Customizing a Soft Key Function

You can relabel the soft keys (- and +) to access different main menu items from the idle display.

Find the Feature	M	> Settings > Other Settings > Personalize > Keys

Press		To
1	✥	scroll to Left or Right
2	CHANGE (+)	open the key editor
3	✥	scroll to the new key function
4	SELECT (+)	confirm the new function The key will have the new function whenever the phone is idle.

Hands-Free Use

You can purchase an optional Motorola Original™ hands-free car kit or headset for your phone. These accessories provide alternative ways for you to use your phone without using your hands.

Note: The use of wireless devices and their accessories may be prohibited or restricted in certain areas. Always obey the laws and regulations on the use of these products.

Automatic Answer

When you activate automatic answer and connect your phone to a car kit or headset, your phone automatically answers calls after two rings.

Find the Feature M > Settings
> Other Settings

Press		To
1	✥	scroll to Car Settings or Headset
2	SELECT (+)	select the feature

Press	To
3 ✥	scroll to `Auto Answer`
4 `SELECT` (+)	select `Auto Answer`
5 ✥	scroll to `On` or `Off`
6 `SELECT` (+)	confirm the setting

Automatic Hands-Free

You can set up your phone to automatically route calls to a car kit when it detects a connection.

Find the Feature M > `Settings`
> `Other Settings`
> `Car Settings`
> `Auto Handsfree`

Press	To
1 ✥	scroll to `On` or `Off`
2 `SELECT` (+)	confirm the setting

Power-Off Delay

When your phone is connected to a car kit, you can set it to stay on for a specified time period after you switch off the ignition. This keeps your phone from draining your vehicle battery by staying on indefinitely, but leaves your phone on long enough that you do not have to re-enter your unlock code when you make short stops.

Find the Feature M > `Settings`
> `Other Settings`
> `Car Settings`
> `Power-Off Delay`

Press		To
1	◈	scroll to the time delay option you want
2	SELECT (⊡)	confirm your selection

Caution: If you select Continuous, the phone does not power off when you turn off the ignition. Be careful not to accidentally drain your vehicle battery if you select this option.

Charger Time

When your phone is connected to a car kit, you can set it to charge itself for a specified time period after you switch off the ignition. This helps ensure that the phone battery gets fully charged while the vehicle is parked.

Find the Feature M > Settings
> Other Settings
> Car Settings
> Charger Time

Press		To
1	◈	scroll to the charge time option you want
2	SELECT (⊡)	confirm your selection

Data and Fax Calls

A Motorola Original™ data kit lets you transfer data between your phone and a computer or other external device. You can:

- synchronize data between your phone and an external device with Starfish TrueSync® software, a Motorola accessory product. See the TrueSync user guide for more information.

  Note: TrueSync software is designed to synchronize with basic features of many popular Personal Information Management (PIM) software and hardware products.

- use your phone as a modem to connect to the Internet
- use your phone to send and receive data and fax calls on your computer or hand-held device.

Connecting Your Phone to an External Device

Connect your phone to an external device (such as a computer or hand-held device) using an infrared wireless link, a serial cable, or a USB cable.

Note: Not all devices are compatible with infrared, serial cable, or USB cable connections. Check your external device for specifications.

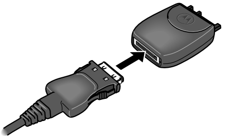
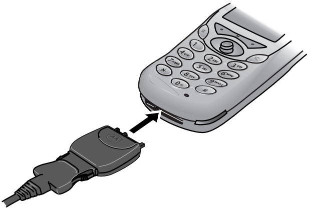
Set Up a Cable Connection

Attach a serial cable or Motorola Original USB cable to the phone and external device as follows.

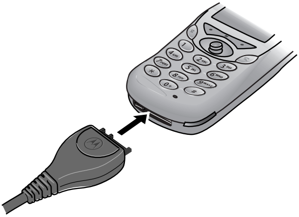
Note: Check your computer or hand-held device to determine the type of cable you need.

Attaching a Serial Cable

Use the interchangeable head on the Motorola Multi-Connect Serial Cable to connect a computer, Palm III device, or Palm V device to your phone.

Do This		
1	Plug the serial cable into the detachable head. Make sure that the Motorola logo on the detachable head and the metal shielding on the serial cable plug are both facing you.	
2	With the Motorola logo and the phone both facing you, plug the detachable head into the phone’s accessory connector port.	
3	Plug the other end of the cable into the serial interface connection on the external device and tighten the screws.	

Attaching a USB Cable

Do This		
1	Plug the end of the cable with the Motorola logo into the phone’s accessory connector port. Make sure that the logo and the phone are both facing you.	
2	Plug the other end—the USB connection—into the USB port on the external device.	

Establish an Infrared Connection

Use the following procedure to connect your phone to an external device using an infrared data link. You cannot use this feature when a serial cable or USB cable is attached to your phone.

Note: This phone is classified as a Class 1 LED product and is considered safe under reasonable use.

Important: In order to create and maintain an infrared connection, your phone must be within one foot (30 centimeters) of the other device. Nothing can block the line of sight between the two devices.

Find the Feature	M > Settings > Connection > IrDA Link

Press	To
START (-)	activate the infrared link The phone displays the IrDA Link connecting message for five minutes or until the link is established. When the link has been established, the phone displays the IRDA link is active message.

If the phone does not find an infrared-capable device, it displays the IrDA link failed. Retry Now? message.

Press	To
YES (-)	try another connection

Break an Infrared Connection

You can break the infrared data connection by moving the device away from the phone, turning off the device, or turning off the phone.

Install the Software

Install the software from the CD-ROM that comes with your Motorola Original data kit. See the data kit's user guide for more information.

Sending a Data or Fax Call

You can connect your phone to a computer or hand-held device to send data or a fax from the connected device.

Data and Fax Calls

Use this feature to transfer data from your computer onto another device, and to synchronize phonebook and datebook information between your phone, computer, and/or hand-held device.

Connect your phone (see “Connecting Your Phone to an External Device” on page 155) and do the following:

Do This		To
1	Check the phone	make sure that the phone is connected and powered on
2	Open the application on your computer	place the call through the application (such as dial-up-networking or fax) **Note:** You cannot dial data or fax numbers through your phone’s keypad. You must dial them through your computer, unless you are making a talk then fax call (see “Sending a Talk Then Fax Call” on page 160).
3	End the transfer on your computer	close the call and connection when the transfer is complete

Receiving a Data or Fax Call

You can connect your phone to a computer or hand-held device to receive data or a fax. Use this feature to transfer data to your computer from another device.

Transfer the Data or Fax

Connect your phone (see "Connecting Your Phone to an External Device" on page 155).

Your phone notifies you when the data or fax call arrives, and transfers the call to the connected device. You must use the application running on the connected device to answer the call.

End the Data/Fax Connection

When the data or fax transfer is complete:

Do This	To
End the call from the connected device	close the connection

Sending a Talk Then Fax Call

Network / Subscription Dependent Feature

You can place a call where you talk and then send a fax to the same phone number within the same call.

Connect to the device that will send the fax (see “Connecting Your Phone to an External Device” on page 155) and do the following:

	Press	**To**
1	keypad keys	enter the phone number for the call
2	M	open the **Dialing Menu**
3	✥	scroll to **Talk Then Fax**
4	**SELECT** (•)	select **Talk Then Fax** (for the next call only)
5	☎	dial the call Speak and, when ready, initiate the fax transfer on the connected device. When transfer is complete, end the call from the connected device.

Security

Assigning a New Code or Password

Your phone's four-digit unlock code is originally set to 1234, and the six-digit security code is originally set to 000000 at the factory. Your service provider may reset these numbers before you receive your phone.

If your service provider has *not* reset these numbers, we recommend that you change them to prevent other users from accessing your personal information or modifying your phone settings. The unlock code must contain four digits, and the security code must contain six digits. Be sure to make a note of the new numbers.

You can also reset your SIM card PIN code, PIN2 code, and/or call barring password if necessary.

Notes:

- Your service provider may retain your phone's security code for customer service purposes. In this case, you will not be able to use phone features that require you to enter the security code (such as master clear, master reset, and the unlock code bypass feature).
- If the only code you can change is the unlock code, the New Passwords menu is unavailable and the Unlock Code option appears on the Phone Lock menu. In this case, open the unlock code editor by selecting: M > Settings > Security > Phone Lock > Unlock Code.

To change a code or password:

Find the Feature M > Settings > Security
> New Passwords

Press		To
1	✣	scroll to the code or password you want to change
2	CHANGE (⊙)	select the code or password
3	keypad keys	enter your old code If you do not know your code, see "If You Forget a Code or Password" on page 163.
4	OK (⊙)	submit your old code
5	keypad keys	enter the new code
6	OK (⊙)	assign the new code
7	keypad keys	re-enter the new code
8	OK (⊙)	confirm the new code

If You Forget a Code or Password

If you forget your security code (originally set to 000000), SIM card PIN code, PIN2 code, or call barring password, contact your service provider.

If you forget your unlock code, try entering 1234 or the last four digits of your phone number. If that does not work, do the following when you see the **Enter Unlock Code** message:

	Press	To
1	M	go to the unlock code bypass screen
2	keypad keys	enter your security code
3	**OK** (+)	submit your security code

Locking and Unlocking Your Phone

You can lock your phone manually or set your phone to lock automatically whenever you turn it off.

When you try to use a locked phone, it asks you to enter the unlock code. A locked phone still rings or vibrates for incoming calls or messages, *but you must unlock it to answer*.

You can make emergency calls on your phone even when it is locked. See “Dialing an Emergency Number” on page 36.

Lock Your Phone Manually

Find the Feature	M > **Settings** > **Security** > **Phone Lock** > **Lock Now**

	Press	To
1	keypad keys	enter your four-digit unlock code
2	**OK** (+)	lock the phone

Set Your Phone to Lock Automatically

You can set your phone to lock every time you turn it off:

Press	To
1 keypad keys	enter your four-digit unlock code
2 `OK` (+)	set the phone to lock automatically

Unlock Your Phone

At the `Enter Unlock Code` prompt:

Press	To
1 keypad keys	enter your four-digit unlock code The unlock code is originally set to 1234. If necessary, see “If You Forget a Code or Password” on page 163.
2 `OK` (+)	unlock your phone

Locking and Unlocking Your Keypad

You can lock your phone keypad to prevent accidental use. This feature is useful in situations where an accidental keypress might inadvertently dial an emergency number or one-touch dial number (for example, when carrying your phone in a purse or pocket).

Press	To
M *	lock or unlock your keypad

You can review these instructions at any time by selecting:
M > Settings > Security > Lock Keypad.

Note: Incoming calls and messages unlock the keypad.

Barring Calls

Call barring lets you restrict outgoing or incoming calls. You can restrict all calls, calls to international numbers, or calls while roaming.

Find the Feature	M > Settings > Security > Call Barring

Press	**To**
1 ✥	scroll to Outgoing or Incoming calls
2 CHANGE (⊙)	select barring for Outgoing or Incoming calls
3 ✥	scroll to a restriction for the barred calls
4 SELECT (⊙)	select the restriction for the barred calls
5 keypad keys	enter your call barring password
6 OK (⊙)	submit your password

Protecting the SIM Card

Your PIN (Personal Identification Number) code protects the information stored on your SIM card. When the SIM PIN feature is activated, you must enter your SIM card PIN code each time you turn on the phone or insert a SIM card. Your SIM card PIN code is given to you by your service provider.

Find the Feature M > Settings > Security
> SIM PIN

Press		To
1	✥	scroll to On or Off
2	SELECT (–)	switch protection on or off
3	keypad keys	enter your SIM card PIN code
4	OK (–)	submit your code

Unblock the SIM Card PIN Code

If you enter an incorrect SIM card PIN code three times in a row, your SIM card is disabled and your phone displays the message SIM Blocked. You need to enter a PIN unblocking key (PUK) code, which you can obtain from your service provider. After entering the PUK code, you will be prompted to create a new SIM card PIN code.

Caution: If the unblocking attempt is tried unsuccessfully 10 times, the SIM card is permanently disabled and your phone displays the message SIM Disabled.

Press		To
1	* * 0 5 *	open the PIN unblocking editor Your phone prompts you to enter the PIN1 Unblock Sequence:

Press		To
2	keypad keys	enter the PUK code
3	`OK` (-)	submit the PUK code Your phone prompts you to `Enter New SIM PIN:`
4	keypad keys	enter a new SIM card PIN code **Note:** The SIM PIN code must be between four and eight digits in length.
5	`OK` (-)	assign the new SIM PIN code Your phone prompts you to `Re-enter New SIM PIN:`
6	keypad keys	re-enter the new SIM PIN code
7	`OK` (-)	confirm the new SIM PIN code and unblock the SIM card

Troubleshooting

Check these questions first if you have problems with your phone:

Question	Answer
Is your battery charged? Do you see ▭ in the display?	The battery level indicator should have at least one segment showing (▭). If it does not, recharge your battery. (See "Charging the Battery" on page 23 and "Battery Use" on page 32.)
Do you have a valid SIM card inserted in your phone?	If necessary, turn off your phone and make sure that you have inserted a valid SIM card. (See "Installing the SIM Card" on page 19).
Has the phone been damaged, dropped, or gotten wet?	Dropping your phone, getting it wet, or using a non-Motorola battery or battery charger can damage the phone. The phone's limited warranty does not cover liquid damage or damage caused from using non-Motorola accessories.
Was a non-Motorola battery or battery charger used?	

Question	Answer
Is the phone set to the proper frequency band for your geographical region?	Phones in different regions of the world use different frequencies to establish a network connection. If necessary, use the `Network` feature (see page 77) to reset your phone’s frequency to either 1900 MHz or 900/1800 MHz when you travel to a new location. **1** From the idle display, press: M > `Settings` > `Other Settings` > `Network` > `Network Setup` **2** Press ✥ to scroll to `Region`. **3** Press `CHANGE` (•) to change the frequency band setting. **4** Press ✥ to scroll to `1900` or `900/1800`. **5** Press `SELECT` (•) to select the frequency. **6** Press `DONE` (•) to save the frequency.
Does the handset have a signal? Do you see ▖ in the display?	The signal strength indicator should have at least one segment showing (▖). If it does not, move to an area with a stronger signal to use your phone.

Question	Answer
Is the earpiece volume too low?	While on a call, press the upper volume key on the side of your phone.
Is the other party unable to hear you?	Your phone may be muted. Press UNMUTE (⌐) if necessary to unmute the phone. Also, make sure that your phone's microphone is not blocked by its carrying case or a sticker.

The following refer to specific problems:

Problem	Solution
My phone was stolen. To whom should I report this?	Report a stolen phone to the police and to your service provider (the company that sends you your monthly wireless service bill).
I forgot my password.	See "If You Forget a Code or Password" on page 163.
I pressed the power key, but nothing happened.	Be sure to press and hold ⊙ (the power key) until the display appears and you hear an audible alert. (This could take several seconds.) If nothing happens, check that a charged battery is installed. (See "Installing the Battery" on page 20.)

Problem	Solution
The display says: `Insert SIM Card` or `Check SIM Card` even though I have inserted my SIM card in the phone.	The SIM card may be incorrectly inserted. Check the SIM card to make sure that it is inserted properly. See "Installing the SIM Card" on page 19.
The display says: `SIM Blocked`. How do I unblock my SIM card?	Call your service provider (the company that sends you your monthly wireless service bill) to obtain the PIN unblocking key (PUK) code. See "Unblock the SIM Card PIN Code" on page 167.
The display says: `Enter Unlock Code`. How do I unlock my phone?	Enter the factory-preset unlock code (1234), or the last four digits of your phone number. (See "Locking and Unlocking Your Phone" on page 164.) If this fails, call your service provider (the company that sends you your monthly wireless service bill).
My phone asks for an unlock code when I try to open a feature.	The application you want is locked. If you own the phone but do not know the unlock code, see "If You Forget a Code or Password" on page 163.

Problem	Solution
My phone does not ring.	If you see 🔕 or 📳 in the display, then the ringer is turned off. See "Ring/Vibrate" on page 141. Also, the ringer may be set to `Silent` even though your phone is set to a ring alert profile. See "Customize an Alert Profile" on page 142.
My phone rings even though I selected the `Silent` (or `Vibrate`) alert profile.	The ringer may be set to play a tone even though your phone is set to a silent alert profile. See "Customize an Alert Profile" on page 142.
I tried to place a call and heard an alternating high/low tone.	Your call did not reach the wireless system. You may have dialed the number too soon after turning the phone on. Wait until the display shows the name of your service provider before making a call.

Problem	Solution
I cannot send/ receive calls.	Make sure that you have a phone signal (see the "Signal Strength Indicator" item on page 28). Avoid electrical or radio interference, and obstructions such as bridges, parking garages, or tall buildings. Your phone also may have the Call Barring feature turned on. If you know the unlock code, you can change this setting in the security menu (M > Settings > Security). Also, check to be sure your SIM card is installed and working.
My phone has poor reception and drops calls.	Make sure that your antenna is not bent or damaged. Also, make sure you have a phone signal (see the "Signal Strength Indicator" item on page 28). Stay clear of any obstructions such as bridges, parking garages, or tall buildings.
I cannot hear others on my phone.	While on a call, press the upper volume key on the left side of your phone. Your phone display should show the volume increasing. Also, make sure that your phone's earpiece is not blocked by its carrying case.

Problem	Solution
I cannot open my inbox.	Before you can use text or information services messages, you must set up the appropriate inbox. See "Setting Up the Text Message Inbox" on page 111.
How do I see the calls I sent or received?	To see the most recent calls you dialed or received, open the "Recent Calls" lists: M > `Recent Calls` > `Received Calls` **or** `Dialed Calls`
My phone will not send voicemail commands, passwords, or other codes.	Your phone sends commands and passwords as DTMF tones. You can set your phone's DTMF tones to be `Long`, `Short`, or `Off`. If you have trouble sending numbers, try changing the DTMF setting. **1** From the idle display, press: M > `Settings` > `Other Settings` > `Initial Setup` > `DTMF` **2** Press ◈ to scroll to `Long` or `Short`. **3** Press `SELECT` (⊙) to select it.

Problem	Solution
My phone's display is too dark.	You can use the `Contrast Setting` feature (see page 76) to change the level of contrast in your phone display. You can also use the `Backlight` feature (see page 76) to change the length of time that your phone's display backlight stays on.
My battery didn't last as long as I expected. What can I do to extend battery life?	Your battery's performance is affected by charge time, feature use, temperature changes, and other factors. For tips on extending your battery life, see "Battery Use" on page 32.
I am unable to record a voice note, voice name, or voice shortcut	Try moving to a quieter location to make your voice recording. Hold the phone about four inches (10 centimeters) away from your mouth, and speak directly into your phone's microphone in a normal tone of voice.

Problem	Solution
I plugged the data cable into my phone but my phone did not beep. How do I know if the data cable is ready to go?	The beep indicates that you are set up correctly. If you did not hear a beep, make sure that both ends of the data cable are connected—the smaller end to your phone and the larger end to your computer. Also, your computer may have deactivated the port to save power. Try opening an application that uses the port, like a fax or dial-up application, and your computer will automatically activate the port.
My phone beeped when I attached the data cable, but my data and fax applications don't work.	Some wireless networks may not support data or fax transmission. If you are roaming on an unfamiliar network, this may be the case. Also, remember that data and fax transmission usually requires a subscription. Call your service provider for more information.

Problem	Solution
When sending data with the data cable, why does the computer show a connection rate of 19200 Kbps?	19200 Kbps is the data transfer rate of the connection between your computer and the phone in a standard CSD (Circuit Switch Data) connection. The rate of the connection between your phone and the network is displayed on your phone, and will be either 14400 or 9600 Kbps. **Note:** A GPRS connection may have a higher data transfer rate.
I can't end my data call by closing the application on my computer. What can I do?	Try pressing ☎ on your phone. Also try disconnecting the cable or turning off the phone. If possible, always close the connection through your computer. These alternative methods may disrupt the application on your computer.
I launched the micro-browser but the display says: Network Not Available.	You may be in an area without service, or you may be connected to a network that does not support Internet access.
I launched the micro-browser but the display says: Server Not Responding.	Try again in a few minutes. The servers may be temporarily busy.

Specific Absorption Rate Data

This model phone meets the government's requirements for exposure to radio waves.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed limits for exposure to radio frequency (RF) energy set by the U.S. Federal Communications Commission for the United States and by Health Canada for Canada. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age or health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC and by Health Canada is 1.6 W/kg.[1] Tests for SAR are conducted using standard operating positions accepted by the FCC and by Industry Canada with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network.

In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public in the U.S. and Canada, it must be tested and certified to the FCC and Industry Canada that it does not exceed the limit established by each government for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) reported to the FCC and available for review by Industry Canada. The highest SAR value for this model phone when tested for use at the ear is 0.77 W/kg[2], and when worn on the body, as described in this user guide, is 0.56 W/kg.[2] (Body-worn measurements differ among phone models, depending upon available accessories and regulatory requirements). While there may be differences between the SAR levels of various phones and at various positions, they all meet the governmental requirements for safe exposure.

The FCC and Industry Canada have granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as being in compliance with the FCC and Health Canada RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of:

`http://www.fcc.gov/oet/fccid`

after searching on FCC ID IHDT6BC1. You may also refer to Motorola’s Web site:

`http://www.motorola.com/rfhealth`

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications & Internet Association (CTIA) Web site:

`http://phonefacts.net`

or the Canadian Wireless Telecommunications Association (CWTA) Web site:

`http://www.cwta.ca`

1. In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.
2. Additional related information includes the Motorola testing protocol, assessment procedure, and measurement uncertainty range for this product.

ITC01-064

The U.S. Food and Drug Administration's Center for Devices and Radiological Health Consumer Update on Mobile Phones

FDA has been receiving inquiries about the safety of mobile phones, including cellular phones and PCS phones. The following summarizes what is known—and what remains unknown—about whether these products can pose a hazard to health, and what can be done to minimize any potential risk. This information may be used to respond to questions.

Why the concern?

Mobile phones emit low levels of radio frequency energy (i.e., radio frequency radiation) in the microwave range while being used. They also emit very low levels of radio frequency energy (RF), considered non-significant, when in the stand-by mode. It is well known that high levels of RF can produce biological damage through heating effects (this is how your microwave oven is able to cook food). However, it is not known whether, to what extent, or through what mechanism, lower levels of RF might cause adverse health effects as well. Although some research has been done to address these questions, no clear picture of the biological effects of this type of radiation has emerged to date. Thus, the available science does not allow us to conclude that mobile phones are absolutely safe, or that they are unsafe. However, the available scientific evidence does not demonstrate any adverse health effects associated with the use of mobile phones.

What kinds of phones are in question?

Questions have been raised about hand-held mobile phones, the kind that have a built-in antenna that is positioned close to the user's head during normal telephone conversation. These types of mobile phones are of concern because of the short distance between the phone's antenna—the primary source of the RF—and the person's head. The exposure to RF from mobile phones in which the antenna is located at greater distances from the user (on the outside of a car, for example) is drastically lower than that from hand-held phones, because a person's RF exposure decreases rapidly with distance from the source. The safety of so-called "cordless phones," which have a base unit connected to the telephone wiring in a house and which operate at far lower power levels and frequencies, has not been questioned.

How much evidence is there that hand-held mobile phones might be harmful?

Briefly, there is not enough evidence to know for sure, either way; however, research efforts are on-going. The existing scientific evidence is conflicting and many of the studies that have been done to date have suffered from flaws in their research methods. Animal experiments investigating the effects of RF exposures characteristic of mobile phones have yielded conflicting results. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. In one study, mice genetically altered to be predisposed to developing one type of cancer developed more than twice as many such cancers when they were exposed to RF energy compared to controls. There is much uncertainty among scientists about whether results obtained from animal studies apply to the use of mobile phones.

First, it is uncertain how to apply the results obtained in rats and mice to humans. Second, many of the studies that showed increased tumor development used animals that had already been treated with cancer-causing chemicals, and other studies exposed the animals to the RF virtually continuously—up to 22 hours per day.

For the past five years in the United States, the mobile phone industry has supported research into the safety of mobile phones. This research has resulted in two findings in particular that merit additional study:

1. In a hospital-based, case-control study, researchers looked for an association between mobile phone use and either glioma (a type of brain cancer) or acoustic neuroma (a benign tumor of the nerve sheath). No statistically significant association was found between mobile phone use and acoustic neuroma. There was also no association between mobile phone use and gliomas when all types of types of gliomas were considered together. It should be noted that the average length of mobile phone exposure in this study was less than three years.

   When 20 types of glioma were considered separately, however, an association was found between mobile phone use and one rare type of glioma, neuroepithelliomatous tumors. It is possible with multiple comparisons of the same sample that this association occurred by chance. Moreover, the risk did not increase with how often the mobile phone was used, or the length of the calls. In fact, the risk actually decreased with cumulative hours of mobile phone use. Most cancer causing agents increase risk with increased exposure. An ongoing study of brain cancers by the

National Cancer Institute is expected to bear on the accuracy and repeatability of these results.[1]

2. Researchers conducted a large battery of laboratory tests to assess the effects of exposure to mobile phone RF on genetic material. These included tests for several kinds of abnormalities, including mutations, chromosomal aberrations, DNA strand breaks, and structural changes in the genetic material of blood cells called lymphocytes. None of the tests showed any effect of the RF except for the micronucleus assay, which detects structural effects on the genetic material. The cells in this assay showed changes after exposure to simulated cell phone radiation, but only after 24 hours of exposure. It is possible that exposing the test cells to radiation for this long resulted in heating. Since this assay is known to be sensitive to heating, heat alone could have caused the abnormalities to occur. The data already in the literature on the response of the micronucleus assay to RF are conflicting. Thus, follow-up research is necessary.[2]

FDA is currently working with government, industry, and academic groups to ensure the proper follow-up to these industry-funded research findings. Collaboration with the Cellular Telecommunications Industry Association (CTIA) in particular is expected to lead to FDA providing research recommendations and scientific oversight of new CTIA-funded research based on such recommendations.

Two other studies of interest have been reported recently in the literature:

1. Two groups of 18 people were exposed to simulated mobile phone signals under laboratory conditions while they

performed cognitive function tests. There were no changes in the subjects' ability to recall words, numbers, or pictures, or in their spatial memory, but they were able to make choices more quickly in one visual test when they were exposed to simulated mobile phone signals. This was the only change noted among more than 20 variables compared.[3]

2 In a study of 209 brain tumor cases and 425 matched controls, there was no increased risk of brain tumors associated with mobile phone use. When tumors did exist in certain locations, however, they were more likely to be on the side of the head where the mobile phone was used.

Because this occurred in only a small number of cases, the increased likelihood was too small to be statistically significant.[4]

In summary, we do not have enough information at this point to assure the public that there are, or are not, any low incident health problems associated with use of mobile phones. FDA continues to work with all parties, including other federal agencies and industry, to assure that research is undertaken to provide the necessary answers to the outstanding questions about the safety of mobile phones.

What is known about cases of human cancer that have been reported in users of hand-held mobile phones?

Some people who have used mobile phones have been diagnosed with brain cancer. But it is important to understand that this type of cancer also occurs among people who have not used mobile phones. In fact, brain cancer occurs in the U.S. population at a rate of about 6 new cases per 100,000 people each year. At that rate, assuming 80 million users of mobile phones (a number increasing at a rate of about 1 million per month), about 4800 cases of brain cancer would be expected each year among those 80 million people, whether or not they used their phones. Thus it is not possible to tell whether any individual's cancer arose because of the phone, or whether it would have happened anyway. A key question is whether the risk of getting a particular form of cancer is greater among people who use mobile phones than among the rest of the population. One way to answer that question is to compare the usage of mobile phones among people with brain cancer with the use of mobile phones among appropriately matched people without brain cancer. This is called a case-control study. The current case-control study of brain cancers by the National Cancer Institute, as well as the follow-up research to be sponsored by industry, will begin to generate this type of information.

What is FDA's role concerning the safety of mobile phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as mobile phones before marketing, as it does with new drugs or medical devices. However, the agency has authority to take action if mobile phones are shown to emit radiation at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of mobile phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions at this time, FDA has urged the mobile phone industry to take a number of steps to assure public safety. The agency has recommended that the industry:

- support needed research into possible biological effects of RF of the type emitted by mobile phones
- design mobile phones in a way that minimizes any RF exposure to the user that is not necessary for device function
- cooperate in providing mobile phone users with the best possible information on what is known about possible effects of mobile phone use on human health

At the same time, FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of mobile phone safety to ensure a coordinated effort at the federal level. These agencies are:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Federal Communications Commission
- Occupational Health and Safety Administration
- National Telecommunications and Information Administration

The National Institutes of Health also participates in this group.

In the absence of conclusive information about any possible risk, what can concerned individuals do?

If there is a risk from these products—and at this point we do not know that there is—it is probably very small. But if people are concerned about avoiding even potential risks, there are simple steps they can take to do so. For example, time is a key factor in how much exposure a person receives. Those persons who spend long periods of time on their hand-held mobile phones could consider holding lengthy conversations on conventional phones and reserving the hand-held models for shorter conversations or for situations when other types of phones are not available.

People who must conduct extended conversations in their cars every day could switch to a type of mobile phone that places more distance between their bodies and the source of the RF, since the exposure level drops off dramatically with distance. For example, they could switch to:

- a mobile phone in which the antenna is located outside the vehicle
- a hand-held phone with a built-in antenna connected to a different antenna mounted on the outside of the car or built into a separate package
- a headset with a remote antenna to a mobile phone carried at the waist

Again, the scientific data do not demonstrate that mobile phones are harmful. But if people are concerned about the radio frequency energy from these products, taking the simple precautions outlined above can reduce any possible risk.

Where can I find additional information?

For additional information, see the following Web sites:

Federal Communications Commission (FCC) RF Safety Program (select “Information on Human Exposure to RF Fields from Cellular and PCS Radio Transmitters”):
`http://www.fcc.gov/oet/rfsafety`

World Health Organization (WHO) International Commission on Non-Ionizing Radiation Protection (select Qs & As): `http://www.who.int/emf`

United Kingdom, National Radiological Protection Board: `http://www.nrpb.org.uk`

Cellular Telecommunications Industry Association (CTIA): `http://www.wow-com.com`

U.S. Food and Drug Administration (FDA) Center for Devices and Radiological Health: `http://www.fda.gov/cdrh/consumer/`

1. Muscat et al. Epidemiological Study of Cellular Telephone Use and Malignant Brain Tumors. In: State of the Science Symposium;1999 June 20; Long Beach, California.
2. Tice et al. Tests of mobile phone signals for activity in genotoxicity and other laboratory assays. In: Annual Meeting of the Environmental Mutagen Society; March 29, 1999, Washington, D.C.; and personal communication, unpublished results.
3. Preece, AW, Iwi, G, Davies-Smith, A, Wesnes, K, Butler, S, Lim, E, and Varey, A. Effect of a 915-MHz simulated mobile phone signal on cognitive function in man. Int. J. Radiat. Biol., April 8, 1999.
4. Hardell, L, Nasman, A, Pahlson, A, Hallquist, A and Mild, KH. Use of cellular telephones and the risk for brain tumors: a case-control study. Int. J. Oncol., 15: 113-116, 1999.

ITC00-010

Warranty

Limited Warranty for Motorola Personal Communications Products and Accessories Purchased in the United States and Canada

I. What This Warranty Covers

Defects in materials and workmanship in the following new **"Products"** manufactured, sold or certified by Motorola, with which this limited warranty is included in/on the package: (a) wireless cellular telephones, pagers and two-way radios that operate via "Personal Radio Service" (such as Family Radio Service and General Mobile Radio Service), together with software imbedded in any of these products, and (b) subject to the following exceptions, accessories or software sold for use with these products.

- Battery Exception. This limited warranty extends only to batteries in which the fully-charged capacity falls below 80% of rated capacity and batteries that leak;
- Software Exceptions. This limited warranty extends only to physical defects in the media (such as CD-ROM) that tangibly embodies each copy of any software sold and/or certified by Motorola for use with Products. Software that is not tangibly embodied in media and that is purchased separately from Products (such as software that is downloaded from the internet) comes **"as is" and without warranty**.

II. What the Period of Coverage Is

Subject to the following exceptions, one year from the date the Products are purchased by the first end-user:

- 90-Day Warranty Exception. The warranty is for 90 days for: (a) any software tangibly embodied in media or (b) any accessories for two-way radios that are covered by this warranty, as described in Section I, above.
- Limited Lifetime Warranty Exception. The warranty is a limited lifetime warranty for the lifetime of ownership by the first end-user of the following products, **only**: (a) decorative covers, including bezel, PhoneWrap™ or case (any model); and (b) ear buds and boom headsets that transmit mono sound through a wire connection (this does **not** include ear buds or boom headsets that either transmit stereo sound or that are wireless, or both).
- Repair/Replacement Exception. The warranty is for the balance of the original warranty or for 90 days from the date returned and delivered to the first end-user, whichever is longer.

III. Who is Covered

This warranty extends to you only if you are the first end-user purchaser.

IV. What We Will Do to Correct Warranty Problems

At no charge to you, we have the option to repair or replace the Products that do not conform to the warranty, or to refund the Products’ purchase price. We may use functionally equivalent reconditioned/refurbished/pre-owned or new Products or parts. No software updates are provided.

V. How to Get Warranty Service

PLEASE CALL US — DO NOT SHIP:

USA
Cellular 1-800-331-6456
Paging 1-800-548-9954
FRS Radios 1-800-353-2729
TTY (Text Telephone)
1-888-390-6456

Canada
All Products
1-800-461-4575
TTY (Text Telephone)
1-888-390-6456

Accessories and software—call the number designated for the product with which they are used.

You will receive instructions on how to ship the Products to Motorola or our designated resource. If instructed to ship the Products, you must ship them with freight, duties and insurance prepaid. Regardless of where you are instructed to return the Products, you must include: (a) a copy of your receipt, bill of sale or other comparable proof of purchase; (b) a written description of the problem; (c) the name of your service provider (if this Product requires subscription service); (d) the name and location of the installation facility (if applicable) and, most importantly; (e) your address and telephone number. If requested, you must also return all detachable parts such as antennas, batteries and chargers. RETAIN YOUR ORIGINAL PROOF OF PURCHASE.

For Products we ask you ship to us, we will ship repaired or replacement Products at our expense for the freight and insurance, but at your expense for any duties. If additional information is needed, please contact us at the telephone number listed above.

VI. What This Warranty Does Not Cover

- **Products that are operated in combination with ancillary or peripheral equipment or software not furnished or otherwise certified by Motorola for use with the Products ("ancillary equipment"), or any damage to the Products or ancillary equipment as a result of such use. Among other things, "ancillary equipment" includes batteries, chargers, adaptors, and power supplies not manufactured or supplied by Motorola. Any of these voids the warranty.**
- Someone other than Motorola (or its authorized service centers) tests, adjusts, installs, maintains, alters, modifies or services the Products in any way. Any of these voids the warranty.
- Rechargeable batteries that: (a) are charged by other than the Motorola-approved battery charger specified for charging such batteries; (b) have any broken seals or show evidence of tampering; (c) are used in equipment other than the Product for which they are specified; or (d) are charged and stored at temperatures greater than 60 degrees centigrade. Any of these voids the warranty.
- Products that have: (a) serial numbers or date tags that have been removed, altered or obliterated; (b) board serial numbers that do not match each other, or board serial numbers that do not match the housing; or

(c) nonconforming or non-Motorola housings or parts. Any of these voids the warranty.

- Defects or damage that result from: (a) use of the Products in a manner that is not normal or customary; (b) improper operation or misuse; (c) accident or neglect such as dropping the Products onto hard surfaces; (d) contact with water, rain, extreme humidity or heavy perspiration; (e) contact with sand, dirt or the like; or (f) contact with extreme heat, or spills of food or liquid.
- Physical damage to the surface of the Products, including scratches, cracks or other damage to a display screen, lens or other externally exposed parts.
- Failure of Products that is due primarily to any communication service or signal you may subscribe to or use with the Products.
- Coil cords that are stretched or that have any broken modular tabs.
- Leased Products.

Flat-rate repair rates may apply to Products not covered by this warranty. To obtain information about Products needing repairs that are not covered by this warranty, please call the telephone number previously listed. We will provide information on repair availability, rates, methods of payment, where to send the Products, etc.

VII. Some Other Limitations

This is Motorola's complete warranty for the Products, and states your exclusive remedies. This warranty is

given in lieu of all other express warranties. Implied warranties, including without limitation, the implied warranties of merchantability and fitness for a particular purpose, are given only if specifically required by applicable law. Otherwise, they are specifically excluded.

No warranty is made as to coverage, availability, or grade of service provided by the Products, whether through a service provider or otherwise.

No warranty is made that the software will meet your requirements or will work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected.

In no event shall Motorola be liable, whether in contract or tort (including negligence) for damages in excess of the purchase price of the Product, or for any indirect, incidental, special or consequential damages of any kind, or loss of revenue or profits, loss of business, loss of information or data, or other financial loss arising out of or in connection with the ability or inability to use the Products, to the full extent these damages may be disclaimed by law.

VIII. Patent and Software Provisions

At Motorola’s expense, we will defend you, and pay costs and damages that may be finally awarded against you, to the extent that a lawsuit is based on a claim that the Products directly infringe a United States patent. Our obligation is conditioned on: (a) you notifying us promptly in writing when you receive notice of the claim; (b) you giving us sole control of the defense of the suit and all negotiations for its settlement or compromise; and (c) should the Products become, or in Motorola's opinion be likely to become, the subject of a claim of infringement of a United States patent, you permit us, at our option and expense, either to: procure for you the right to continue using the Products; replace or modify them so that they become non-infringing; or grant you a credit for such Products, as depreciated, and accept their return. The depreciation will be an equal amount per year over the lifetime of the Products, as established by Motorola.

Motorola will have no liability to you with respect to any claim of patent infringement that is based upon the combination of the Products or parts furnished under this limited warranty with ancillary equipment, as defined in VI., above.

This is Motorola’s entire liability with respect to infringement of patents by the Products.

IX. State Law and Other Jurisdiction Rights

Some states and other jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or limitation on the length of an implied warranty, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from jurisdiction to jurisdiction.

To obtain information on Motorola Personal Communications Products, including warranty service, accessories and optional Extended Warranties on selected Products, please call:

USA
Cellular 1-800-331-6456
Paging 1-800-548-9954
FRS Radios 1-800-353-2729
TTY (Text Telephone)
1-888-390-6456

Canada
All Products
1-800-461-4575
TTY (Text Telephone)
1-888-390-6456

Accessories and software—call the telephone number designated above for the product with which they are used.

DO NOT SHIP PRODUCTS TO THESE ADDRESSES — INSTEAD PLEASE CALL.

To correspond with Motorola about Products, please write us at `http://www.motorola.com` or at:

In the USA:
Motorola, Inc.
600 North U.S. Highway 45
Libertyville, IL 60048

In Canada:
Motorola Canada Limited
5875 Whittle Road
Mississauga, ON L4Z 2H4

ITC01-078

Export Law Assurances

This product is controlled under the export regulations of the United States of America and Canada. The Governments of the United States of America and Canada may restrict the exportation or re-exportation of this product to certain destinations. For further information contact the U.S. Department of Commerce or the Canadian Department of Foreign Affairs and International Trade.

Index

U.S. patent Re. 34,976

Wireless Phone Safety Tips

"Safety is your most important call!"

Your Motorola wireless telephone gives you the powerful ability to communicate by voice—almost anywhere, anytime, wherever wireless phone service is available and safe conditions allow. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When driving a car, driving is your first responsibility. If you find it necessary to use your wireless phone while behind the wheel of a car, practice good common sense and remember the following tips:

1. **Get to know your Motorola wireless phone and its features such as speed dial and redial.** If available, these features help you to place your call without taking your attention off the road.
2. **When available, use a hands-free device.** If possible, add an additional layer of convenience to your wireless phone with one of the many Motorola Original™ hands-free accessories available today.

3 **Position your wireless phone within easy reach.** Be able to access your wireless phone without removing your eyes from the road. If you receive an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.

4 **Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions.** Rain, sleet, snow, ice, and even heavy traffic can be hazardous.

5 **If you receive an incoming call at an inconvenient time do not take notes or look up phone numbers while driving.** Jotting down a "to do" list or going through your address book takes attention away from your primary responsibility—driving safely.

6 **Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic.** Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.

7 **Do not engage in stressful or emotional conversations that may be distracting.** Make people you are talking with aware you are driving and suspend conversations which have the potential to divert your attention away from the road.

8 **Use your wireless phone to call for help.** Dial 9-1-1 or other local emergency number in the case of fire, traffic accident or medical emergencies.*

9 **Use your wireless phone to help others in emergencies.** If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.*

10 **Call roadside assistance or a special non-emergency wireless assistance number when necessary.** If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.*

---

* Wherever wireless phone service is available.

Check the laws and regulations on the use of wireless telephones and their accessories in the areas where you drive. Always obey them. The use of these devices may be prohibited or restricted in certain areas.

For more information,
please call
1-888-901-SAFE
or visit the
CTIA Web site at
www.wow-com.com™

ITC00-011

motorola.com